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MENTALLY DISORDERED OFFENDERS: AN EVALUATION OF THE "OPEN DOORS" PROGRAMME AT HM PRISON, BARLINNIE

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CONTENTS

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ABSTRACT

This study was designed to evaluate the effectiveness of a programme which aims to support and manage mentally disordered offenders in HM Prison, Barlinnie. The following hypotheses were tested:

1. Significant levels of psychiatric morbidity would be found in a prison setting.
2. The 'Open Doors' participants had more mental health problems than controls.
3. Participation in the programme improved their mental health.

METHODOLOGY

To assess psychiatric morbidity in the prison all the admissions over a one week period were interviewed. The questionnaires recorded demographic and health information and psychological morbidity was assessed using the Clinical Interview Schedule-Revised (CIS-R) and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN). This cohort was followed up after 5 months to identify which services had been used. Programme participants were interviewed at the beginning and at the end of their involvement with the "Open Doors" programme. The first questionnaire included demographic and health information, the structured clinical interview for DSM-III-R non patient (SCID), the General Health Questionnaire (GHQ 30), the Holmes and Rahe Social Readjustment Scale examining life events (LE) and the Health of the Nation Outcome scales (HoNOS). The follow up questionnaires included some demographic information and repeated the SCID, the GHQ 30, LE and HoNOS. A participant satisfaction scale was also used on follow up. A control group matched for age, time into imprisonment, length of sentence and charge/conviction were interviewed. Interviews were carried out

with programme staff and managers. Interviews were held with other staff groups within the prison and in the community. Group sessions were directly observed. Programme literature and paperwork was examined.

RESULTS

The survey of psychological morbidity in the prison population found a 5% incidence of psychosis, 20% depression and 9.2% anxiety disorders. Sixty six percent abused drugs, 16% abused or were dependent on alcohol and 2% used both. Two were referred to 'Open Doors' and less than 10% to other prison mental health services including drug and alcohol workers.Twenty percent of "Open Doors" subjects had a psychotic illness, 30% had a non psychotic depression and 22% an anxiety disorder. They had significantly more mental health problems than the controls. Forty five percent fulfilled criteria for drug abuse or dependence, 35% for alcohol and 5% for both. Over 65% had used drugs intravenously. At follow up interview "Open Doors" participants showed significant improvements in their mental health.

CONCLUSIONS

There is a very high incidence of mental ill health in the prison population. Existing services are not able to identify or treat this high volume of mental disorder.

The programme was identifying and working with prisoners with significant mental health problems. Those individuals who do become involved in the programme improve following participation and there are high levels of participant satisfaction. However the number of prisoners who do become involved in the programme is small and the impact on the prison population is therefore low.

INTRODUCTION AND LITERATURE REVIEW

There is evidence for a significant incidence of mental disorder in prisons and concern has been expressed that some of this is undetected and untreated (Cooke 1994, Davidson 1995, Brooke 1996, Singleton 1998, Birmingham 1996, Mason 1997, Humphreys 1999). At the same time there has been increasing concern about violent behaviour in those with mental illness. This has probably been fuelled by the media and high profile public inquiries following homicides by psychiatric patients, such as the Christopher Clunis enquiry (1994). Prison health care and the treatment of mentally disordered offenders has been the subject of inquiries and reports. The Woolf Report (1990) and the Reed Report (1992) are of particular relevance to the care of mentally disordered offenders. Severely mentally ill offenders should be cared for in hospitals not in prisons. Even if this population is detected and transferred to hospitals there remains a large number of prisoners with mental health problems. It is a stated aim of prison healthcare that the standard and choice of care should be equivalent to that provided in the community. Time in custody can be seen as an opportunity for services to intervene with a population that suffers from high rates of mental health problems.

It is therefore essential to have programmes which are involved in the detection and treatment of people with mental disorder in prisons. However, there is little information on projects working with mentally disordered offenders in prisons. It is in this context that this research was carried out into the "Open Doors" programme which aims to work with people with mental disorder in prison.

The Scottish Prison Service

The Scottish Prison Service is a government funded organisation responsible for all state run prisons in Scotland. (Scotland's first private prison opened in May 1999.) There are 21 different establishments. They fulfill all the different custodial functions containing prisoners from remand to long term sentences in varying levels of security. The prison service employs its own medical and nursing staff. Specialist services such as those provided by psychiatrists are contracted from the NHS. Social work services are contracted from local government social work departments.

HM Prison, Barlinnie is situated in northeast Glasgow. The prison was first opened in 1886. It is Scotland's largest prison holding one fifth of the prison population. It is designed to hold a maximum of 1000 prisoners but often has up to 1300. There is a large throughput of prisoners with over 25,000 admissions each year.

It is a local prison. Its functions are as follows:

1. To house remand prisoners from local courts
2. To house short term prisoners (those serving sentences of less than 4 years)
3. To house long term prisoners (those serving sentences of over 4 years) until they can be transferred to other prisons
4. To hold prisoners outwith the normal classifications, such as those on temporary transfer or those requiring the facility of the segregation unit.

Young offenders, both remand and convicted, from courts in the Glasgow area stay overnight in HM Prison, Barlinnie prior to transfer to young offender institutions.

History of the "Open Doors" Programme

The "Open Doors" programme was set up in 1991 in response to the perception of significant mental health problems in prisoners. It is a social work programme funded by a mental illness specific grant. The main aim of the programme is to promote positive mental health within HM Prison, Barlinnie. The original plan was to have programme workers from a variety of backgrounds such as health, social work and community education in order to facilitate a multidisciplinary framework.

When the programme began in 1991 there were four main objectives:

1. Throughcare and community care packages
2. Provision of support while in HM Prison, Barlinnie.
3. Personal skills training
4. Alternatives to custody

These aims were to be carried out by a mixture of group and individual sessions tailored to the needs of each prisoner. There was also a horticultural project, which worked on a leisure garden in the prison. There was an employment training project which involved about 50 people each year. Over the past 8 years the programme has changed its objectives while maintaining its aim to promote positive mental health within the prison. There is no longer an employment training scheme.

The programme considers that mental disorder should be considered as broadly as possible, therefore not adopting a 'medical model' of mental illness. This means that they accept referrals of people who are struggling with prison life as well as people who have more obvious mental health problems.

Definition of Mentally Disordered Offenders

Mental disorder is defined differently in the Mental Health (Scotland) Act 1984 compared to the Mental Health Act 1983, which covers England and Wales. The Mental Health (Scotland) Act 1984 states that "mental disorder means mental illness or mental handicap however caused or manifested". The definition in the Mental Health Act 1983 states that "mental disorder means mental illness, arrested or incomplete development of mind, psychopathic disorder and any other disorder or disability of mind".

In the Health, Social Work and related Services for Mentally Disordered Offenders in Scotland (1999) policy document the term mentally disordered offender covers those who are "considered to suffer from a mental disorder as defined in the Mental Health (Scotland) Act 1984, whether or not they are, or may be, managed under its provisions and come to the attention of the criminal justice system." It therefore describes people who suffer from mental illness or learning disability. People who have a personality disorder are considered separately in this document. It is recognised that those with a personality disorder are not a homogeneous group for whom established treatment techniques have proved successful. It recommends the setting up of a working group to consider the problems posed by these offenders. This is being carried out by the MacLean Committee.

CRIME AND MENTAL DISORDER

The evidence for a significant incidence of mental disorder in prisoners raises the questions of whether these individuals were looked after by the National Health Service in the past and what contribution the mental disorder makes to their offending behaviour.

Penrose (1939) proposed that there was an inverse relationship between prison and psychiatric hospital populations. Therefore as the hospital population reduced it would be expected that the prison population of mentally ill would increase. The move to community care in Britain has raised concern that ex patients are now being housed in prisons. Conacher (1996) discussed the 'Penrose Effect' stating that the trend to downsize psychiatric hospitals has been accompanied by rising levels of violence in many developed countries. This is not a simple relationship. There have been many social changes which contribute to crime rates. As Conacher comments a lack of compassion for the disadvantaged in society may underlie the 'Penrose Effect'.

There are several studies which support the 'Penrose Effect'. In America, where deinstitutionalisation of psychiatric patients has been greater, studies such as that by Teplin (1984) have found a higher arrest rate amongst those with mental disorder than non-mentally disordered persons. In similar situations she found that those perceived as mentally disordered were more likely to be arrested (46.7%) than "normals" (27.9%). Teplin noted that the majority of police officers were aware of the difficulties in obtaining admission to local psychiatric hospitals and that the officers would often contact other agencies prior to arresting the individual. This suggests that psychiatric

patients may become involved with criminal justice services even when it is recognised that they are mentally disordered because of lack of alternative disposals. Other studies have disagreed with Teplin's findings of a higher arrest rate (McFarlane et al, 1989).

In a retrospective study of 362 men remanded to Winchester prison for psychiatric reports between 1979 and 1983 (Coid 1988), it was found that one in five were rejected for treatment by the NHS consultant responsible for their care. Those with learning disability, organic brain damage and chronic psychosis were the most likely to be rejected. They posed the least threat to the community in terms of criminal behaviour but were more likely to be sentenced to prison. These individuals may have been long stay psychiatric inpatients in the past.

Steadman et al (1998) in the MacArthur Violence Risk Assessment Study found that there was no difference in violence between discharged psychiatric patients and a control group. They compared violence by people discharged from psychiatric care to a control group of people resident in the same neighbourhoods. In both groups there was an increase in violence where there was substance misuse. The highest incidence of violence was found in those with a combination of substance misuse and conditions such as antisocial personality disorder.

Modestin and Amman (1996) found that patients with schizophrenia were more likely to commit violent offences, crimes of dishonesty, sexual offences and drug offences and less likely to commit vehicle offences. They had found significant differences in rates of

criminality between patients with schizophrenia and the general population until they controlled for age, sex, marital status, occupational level and community size.

Eronen et al (1996) studied 93 individuals with schizophrenia who had been convicted of a homicide. They found that the risk of committing a homicide was 10 times greater for people with schizophrenia than for the general population. If there was coexisting alcoholism the odds ratio increased to more than 17 times in males. Criticisms of this study include the fact that it is retrospective and that estimates of community disease prevalence were based on an American epidemiological study.

Dual diagnosis (psychotic illness and alcohol or drug misuse) has been found to be significantly associated with violence (Scott et al, 1998, Swartz et al, 1998) and arrest (Muntaner et al,1998). Thomson et al (1997) found that 48% patients in high security care abused alcohol or drugs.

Reiss et al (1996) found that 20 % of young male psychopaths who had been treated in a high security hospital reoffended two years post discharge. This study found that a supportive social network was important in preventing recidivism in this patient group.

Hwang and Segal (1996) found that the arrest rate of patients with mental illnesses living in community homes was lower than the general population. However, if violent crimes alone were considered it was 1.33 times higher. The strongest predictors of offending in

this and other studies have been male gender, ethnicity, substance abuse and previous convictions (Wessley 1997).

In conclusion there is some evidence that individuals who may have been looked after in psychiatric institutions in the past are now being cared for in the prison system. The relationship between mental disorder and crime is difficult to elucidate and is small compared to other factors such as gender, age or substance misuse.

Prevalence of psychiatric morbidity in prisons

Many studies have found a high prevalence of mental disorder amongst prisoners. Cooke (1994) surveyed the Scottish prison population interviewing 247 male prisoners both remand and convicted. Using the Schedule for Affective Disorders Lifetime Version (SAD-L) he found a point prevalence of 7.3% for major psychological disorders such as major depression and schizophrenia and 32% for minor psychological disorders. Thirty eight percent had a lifetime prevalence of alcohol dependence and 20.6% of drug abuse or dependence.

In Davidson et al's (1995) study of the remand population in Scotland, 389 remand prisoners were interviewed using the clinical interview schedule. It was found that 2.3% suffered from a major psychiatric disorder. Fourteen percent had significant signs of depression and 10.8% of anxiety and agitation. Twenty two percent had alcohol related problems and illicit drugs had been used by 73.2%.

Prevalence studies in England and Wales have also shown a high incidence of mental disorder amongst prisoners. Gunn et al (1991) surveyed 5% of men serving prison sentences in England and Wales. They found that 37% of those interviewed had a psychiatric disorder. Two percent had a psychotic illness, 6% a neurotic illness, 10% a personality disorder and 23% misused substances. Three percent were judged to require transfer to hospital for psychiatric treatment and a further 10% required further psychiatric assessment or treatment in prison.

Brooke et al (1996) used the Schedule for Affective Disorders and Schizophrenia, lifetime version (SADS-L) to interview 750 remand prisoners. They found a psychiatric disorder in 63% of inmates. This included a point prevalence of 5% for psychosis and 26% for neurotic illnesses. Thirty eight percent were diagnosed as misusing drugs or alcohol. They judged that 9% needed transfer to a NHS bed and 17% required treatment by prison health care services.

Birmingham et al (1996) in their study of 548 remand prisoners using the SADS-L found that 26% had a serious mental disorder excluding substance abuse. Four percent were suffering from a psychotic illness. If substance abuse or dependency is included 62% satisfied diagnostic criteria for illness. Fifty seven percent were using illicit drugs before remand and 33% met DSM-IV drug misuse or dependence criteria. Thirty seven percent met misuse or dependence criteria for alcohol (Mason et al, 1997).

The survey of psychiatric morbidity amongst prisoners in England and Wales (1998) carried out in 1997 by the Office for National Statistics found a higher incidence of mental disorder. They interviewed one in eight male remand prisoners (n=1250) and one in thirty four male sentenced prisoners (n=1121). To assess psychological morbidity they used the clinical interview schedule – revised (CIS-R) and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN). The prevalence rates for psychosis in the past year were 10% for remand and 7% for sentenced male prisoners. If this is taken as representative of the whole prison population in England and Wales, there may be about 4500 male prisoners with a recent or current psychotic illness. They found that 59% of remand and 40% of sentenced male prisoners suffered from a neurotic disorder. Twenty six percent were suffering from mixed anxiety and depressive disorders, 11% from generalised anxiety and 17% from a depressive episode. This compares with the OPCS household survey (Meltzer, 1995) which found that 12% of men were suffering from a neurotic disorder (this included depression, anxiety and phobias). Twenty seven percent of remand and 20% of sentenced prisoners said that they had self-harmed at some time in their life. Fifty eight percent of remand and 63% sentenced male prisoners had been abusing alcohol in the year before imprisonment. Fifty one percent of remand and 43% of sentenced men were dependent on illicit drugs in the year prior to imprisonment. Twenty six percent of remand and 18% sentenced were dependent on opiates. The prevalence for any personality disorder assessed using the Structured Clinical Interview for DSM-IV (SCID II) was 78% for remand and 64% for sentenced male prisoners. Antisocial personality disorder was the most common personality disorder occurring in 63% of remand and 49% of sentenced prisoners.

There have been similar studies carried out in other Western countries. Hermann et al (1991) in Australia interviewed 158 men and 31 women using the Structured interview for DSM-III-R (SCID). They found that 3% had a current diagnosis of psychosis and 12% had current mood disorders mainly major depression. Sixty nine percent had a lifetime diagnosis of dependence or abuse of alcohol or drugs or both. In America, Teplin (1994) using the diagnostic interview schedule found 6.1% of men admitted to Cook County jail had symptoms of serious mental illnesses, including schizophrenia, bipolar disorder and major depression. In Canada, Bland et al (1998) interviewed 222 sentenced prisoners and found a lifetime prevalence for substance misuse of 87.2%. They found antisocial personality disorder in 56.7% of their sample and schizophrenia in 2.2%. Twenty three percent of the prisoners had attempted suicide.

These studies have shown a high incidence of mental illnesses and substance abuse amongst the prison population. Many prisoners will have both mental illness and substance misuse problems. It has been argued that this co-morbidity makes it more likely for these individuals to go to jail (Abram, 1991). This is because no other facilities want to treat them. The increased levels of violence in individuals with substance abuse problems and severe mental illness also make it more likely that they will be cared for in prison rather than in hospitals or the community.

Suicide in Prison

A suicide in custody is an individual tragedy and often leaves a bereaved family. It also causes public concern and media attention. Dooley (1997) in Ireland commented that the

media shows little interest in individual suicides in the community but any suicides in custody generate national interest. Most prison suicides are unpredictable. Although risk factors have been identified from studies of prison suicides these factors are common in this population. This does not excuse poor assessment and treatment of mental illness. Suicide in prisons has been calculated to be 4 times the national rate. Bogue and Power (1995) analysed the characteristics of suicide in Scottish prisons. They found that prisoners who committed suicide had a previous history of self harm and psychiatric morbidity. The majority of deaths occurred less than 3 months after incarceration and half of the deaths occurred in untried prisoners. Of those who killed themselves within 1 week of coming into prison two thirds had an established history of drug and or alcohol dependence. Dooley (1990) examined prison suicides in England and Wales between 1972 and 1987. He found that almost a third had had psychiatric contact in the past and that 43% had a previous history of self harm. One hundred and fifty five out of the two hundred and ninety five cases studied had had a medical examination in the week before their suicide. Forty percent of these were for psychiatric review and sixteen percent were noted to be at risk of self harm.

Dooley suggested that instead of focussing on an individual's risk factors for suicide, it may be more effective to identify environmental factors that could alter the risk of self harm in vulnerable individuals. He listed three elements of an environmental approach to risk reduction. The first was consistency/certainty. This aims to provide a safe and certain environment for all prisoners. The second was communication. This enables prisoners under stress to communicate this to staff or others and allows an adequate response thus

creating an environment of trust. The third element is the provision of choice. Imprisonment leads to loss of autonomy which may induce a sense of helplessness and hopelessness. Giving prisoners a greater degree of control may reduce this sense of hopelessness.

The Scottish Prison Service has decided to continue to concentrate on individual risk factors as a means of reducing suicides. The 'Ministerial Task Force report on apparently self-inflicted deaths in Scottish prisons' (1998) made recommendations aimed at reducing the suicide rate. These include: improving ways of identifying 'at risk' prisoners; improving communication both with prisoners families and with other agencies inside and outside the prison; and improving care within the prison particularly aimed at substance misuse problems. The report notes the culture amongst prisoners of not communicating with prison officers, which means that prison officers are often unaware of a prisoner in crisis.

Unmet Need for Psychiatric Services in Prisons

In Birmingham et al's (1996) study of remand prisoners (n=548), 23% of the mentally disordered prisoners had been recognised by prison medical staff. Prison medical screening identified only 25% of those who were acutely psychotic. Only two fifths of patients who required urgent psychiatric treatment were put into the prison hospital. The remainder including 16 who were acutely psychotic, were placed in ordinary cells. The drug and alcohol problems of this population were also examined (Mason et al 1997). From the screening interviews 71% were judged to require help directed at their drug or

alcohol use and 36% were judged to require a detoxification programme. Of the 71%, the prison reception screening identified recent drug use in 24% and problem drinking in 19%. Drug use was more likely to be identified if an inmate was using multiple substances including opiates or had a diagnosis of abuse or dependence. Nine percent were prescribed treatment to ease the symptoms of substance withdrawal.

These prisoners were followed up during their remand period (Birmingham et al 1998). Twenty four percent of those judged to require psychiatric input were referred to psychiatric services. Six of the 16 men requiring immediate transfer to psychiatric hospital were referred. Of the 260 appointments made with mental health professionals, 24% were not kept and psychiatric intervention ended prematurely in 10 cases. The majority of mentally disordered prisoners were left undetected and untreated during their remand.

There are similar problems in women's prisons. A paper describing the first 80 contacts for a new psychiatric service in a women's prison (Humphreys et al 1999) described failure to transfer patients to local services and women who required hospital treatment being released before transfer could be arranged.

Unmet need is a problem in other countries such as the USA. Elliott (1997) reports on his evaluation of the mental health services in 8 prisons in Georgia carried out in response to a law suit. He found that the quality of the services was so low as to constitute deliberate indifference. He described failure of continuity of care, over prescribing of antipsychotic

and antidepressant medication, lack of structured psychosocial rehabilitation programmes, and poor staff training and supervision.

Mitchison et al (1994) reviewed the medical notes of 834 prisoners in HMP Leeds. They found a recorded history of psychiatric contact in 23%: 15% admitting to drug use and 16% to a history of depression or self harm. They interviewed a sample of 43 prisoners and found that, out of this 43, 18 had failed to report any of the above on reception. They identified reasons why prisoners had failed to disclose their past psychiatric histories and made recommendations to improve reception screening. They found that prisoners often did not disclose drug misuse because they thought it would lead to closed visits, the denial of parole or that they would be put in a 'strip cell'. They denied past psychiatric contact because of pressures of time or they might have been sent to the prison hospital. Depression and a history of self harm were denied because of fears about being transferred to a psychiatric unit or because of the stigma.

This research has shown the detection and treatment of mental disorder in prisoners to be inadequate. This may be due to factors such as high throughput of individuals, frequent transfers to other prisons, lack of confidence in confidentiality and a worry that if the prisoner admits to a problem he will receive worse treatment.

Interagency Working

The Scottish Office policy document on Health, Social Work and related Services for Mentally Disordered Offenders in Scotland (The Scottish Office, 1999) describes

objectives for the management of the mentally disordered individual in contact with criminal justice services including prisons. It states that 'problems of mental illness require a coherent response from the Scottish Prison Service, the health service and local authorities. This should take the form of a care management approach .....The aim should be the provision of a continuous, integrated throughcare package .... The Scottish Prison Service intends to develop multidisciplinary approaches to the assessment and care of prisoners with mental health problems, involving health, social work, disciplinary and education staff.'

Multidisciplinary working is highlighted again in the Scottish Prison Service's document 'Act and Care' (Scottish Prison Service1998). This is the service's suicide risk management strategy. It states that any member of staff can raise concerns if it is thought that a prisoner is at risk of self-harm. Appropriate staff will then be involved in a case conference about the prisoner identified as being at risk.

Petch (1996) stated that effective care can be delivered to the mentally disordered offender provided there are close links between agencies. These links are difficult to establish but are essential to successful management.

Social Work in Prisons

Social work is an integral part of the services provided for prisoners. It is part of the provision of throughcare. Throughcare aims to promote the continuity of work

undertaken with an individual offender throughout all phases of their sentence, both during the sentence and after release into the community (Maguire and Raynor, 1997).

The role and objectives of social work criminal justice services are set out in the National Objectives and Standards for Social work Services in the Criminal Justice System (1991). It was last amended in 1999.

"Social work objectives in prisons are:

1. To offer prisoners access to a range and level of services similar to those available in the community.
2. To contribute through advising on and in some cases providing a range of individual and group work programmes to address offending behaviour as agreed with the Governor.
3. Where agreed, to provide appropriate professional support and assistance to help prisoners resettle and reintegrate into society on release."

The operational principles for social work in prison are that they must:

1. Be delivered, by fully qualified social workers, as an integral part of the local authorities social work services.
2. Have a specific focus on offending behaviour and address problems arising from imprisonment and those likely to arise on release.
3. Help prisoners to maintain, where appropriate, their family and community ties.

Therefore the core activities of social workers in prisons include:

1. Risk assessment
2. Contributing a social work perspective to the strategic planning of the establishment
3. Liaison with, and providing consultancy to, prison staff and managers.
4. Work with prisoners' families and other social supports to reduce the risk of re-offending and to assist the reintegration into the community.

The national standards identify vulnerable prisoners as a priority client group. This includes those at risk of self-harm and those who are mentally disturbed.

Evidence for benefits from Throughcare

Jacoby and Kozie-Peake (1997) studied 27 mentally ill prison inmates and followed them up after release. They found that social support provided both in prison and after release was associated with a higher quality of life. However, social support did not reduce recidivism or psychiatric hospitalisation following release.

Wilson et al (1995) described an assertive case management programme for mentally disordered offenders in the community. They found that the programme did increase the time between periods in prison. They described the provision of a specialised social support network being a key element in maintaining these patients in the community.

Veysey et al (1997) looked at continuity of care in U.S. Jails. They found that mental health resources are frequently insufficient to meet the needs of mentally disordered offenders in jails and are often inaccessible to those released into the community.

Solomon and Draine (1995) looked at case management services and their effect on recidivism for 51 seriously mentally ill, homeless released prisoners. They found that when the case managers had actively sought legal stipulations to make case management a condition of parole, the individuals were more likely to return to jail.

Prison officer views

Prison officers have the most contact with individual prisoners. They are therefore in the best position to detect any abnormalities in behaviour that may relate to mental health problems. However, they have little training in mental health issues. Dooley (1990) noted that improved communication between inmates and staff may be one way of preventing suicides in custody.

McManus (1994) commented that there was a clear need for prison officers in Scotland to be given training in the recognition of symptoms of the most common mental illnesses. He asked prison officers what they understood by the term mentally disturbed. He found that low IQ was the commonest response followed by those who show peculiar behaviour and those who cannot cope with jail. Mental illness such as depression and coming off drugs was the fifth most frequent response. Prison officers estimated the frequency of mental disturbance in prisoners as between 0.5% and 50% with an average in male prisons of 3%. Staff reported that mentally disturbed prisoners caused extra demands on time and required careful handling. They reported feeling that the mentally disturbed were unpredictable. Withdrawn prisoners could be missed out altogether and forgotten

about in a busy prison wing. He found that most officers would like further training and more information sharing with other staff groups.

In the Third Prison Survey (1998) prison staff were asked about the adequacy of their training. Seventy two percent of staff felt that training in counselling skills and in dealing with suicidal individuals was inadequate. Sixty eight percent viewed training in awareness of prisoner programmes to be inadequate.

Kropp et al (1989) interviewed American prison officers about their perceptions of mentally disordered offenders. They found that in general mentally disordered inmates were perceived less favourably than were other inmates. They were thought to be more dangerous as they were perceived to be unpredictable, irrational and mysterious. In contrast, however, they were believed to be less manipulative. The officers interviewed said that they would like additional training in managing mentally disordered offenders.

There is evidence from America that this lack of knowledge noted in prison officers can have a negative effect on mentally disordered prisoners. Porporino and Montiuk (1995) compared the prison careers of 36 mentally disordered offenders (all with a psychotic illness) to those of 36 matched non mentally ill prisoners. They found that the mentally ill prisoners were disadvantaged while in prison in terms of higher security category and less access to escorted or unescorted temporary passes. They were given fewer opportunities for early release on parole and when they were released they were more likely to have their licences revoked without committing a further offence. This is despite

the fact that it was found that it was the non-disordered group who were more likely to commit a new offence whilst under supervision. Morgan et al (1993) studied the adaptation of individuals with schizophrenia to prison. They too found that on all their outcome variables such as ability to obtain a job in prison, number of days in "lock up" and ability to obtain release the group with schizophrenia fared less well than the matched controls.

Therapeutic Programmes in Prisons

The majority of programmes in prisons are designed to prevent re-offending rather than to help mental health problems. However, there are similarities to programmes used by mental health professionals. Many of the prison programmes are developed and administered by psychologists. They include anxiety management programmes and cognitive skills courses. It is therefore useful to look at the structure of these programmes and review what has been found to be effective.

Imprisonment has been shown to worsen rates of recidivism. The Scottish Offenders Index shows that 63% of Scottish men who were released in 1989 had re-offended in the next 5 years (The Scottish Executive). Forty three percent had received a custodial sentence. These figures exclude motor vehicle offences. Cooke (1997) followed up a sample of Scottish prisoners and found that 72% were reconvicted within 2 years of release and 48% were re-imprisoned within 2 years.

McGuire (1995) reviews research into 'what works' in terms of preventing re-offending. He found that the evidence for useful outcomes from classical psychotherapeutic models was poor. Russell (1990) found that evaluations of individual casework counselling were only positive when more structured methods such as behavioural techniques were used. McGuire (1995) lists six principles to be taken into account in the design of an effective programme aimed at reducing re-offending.

1. "Risk classification." Matching the offender risk level and the degree of service intervention, so that higher risk individuals require more intensive services.
2. "Criminogenic needs." If the aim of the programme is on reducing recidivism, then the problems which contribute to the offending must be distinguished from those which are unrelated to it.
3. "Responsivity." The learning styles most offenders respond best to are active and participatory.
4. "Community base." Community based programmes are more effective than those in prison.
5. "Treatment modality." More effective programmes were found to be multimodal, skills orientated and utilised cognitive behavioural methods.
6. "Programme Integrity." Effective programmes are those in which the stated aims are linked to the methods used. Adequate resources are available to achieve these aims and staff are appropriately trained and supported. There is an agreed plan for programme monitoring and evaluation, and these activities take place and are systematically recorded.

Hollin (1999) in his meta-analysis of the literature of treatment programmes for offenders states that a consensus has arisen in the literature on 'what works' agreeing with McGuire's six principles. He emphasises that indiscriminate targeting of treatment programmes is counterproductive in reducing recidivism. He also states that the type of treatment programme is important with stronger evidence for structured behavioural approaches than for less focussed approaches and that the most successful studies include a cognitive component to focus on attitudes and beliefs. From the studies used, he found that there was a treatment effect of a 10% reduction in reoffending. Some studies have shown a decrease in recidivism of over 20%. Treatment appears to be more effective with high risk offenders. He concludes that if treatment programmes are to work there is a need for an organisational structure that values and facilitates rehabilitative work, staff need to be trained to deliver programmes and management systems must be in place to monitor the design, implementation and progress of treatment programmes.

The Scottish Prison Service is developing structured group programmes which look at reoffending and teach new skills as recommended above. There are cognitive skills programmes based on those used in the Canadian Prison Service (Ross et al, 1986). These are being run by prison officers with supervision and evaluation being carried out by prison psychologists. Group programmes for prisoners with mental health problems are less common. Recently it has been planned to set up a ten week anxiety management group programme in HMP, Barlinnie. The main difficulty in doing this has been identifying prisoners, who are suitable for the programme.

There are institutions that are designed to treat mentally disordered offenders such as HM Prison, Grendon in England (Genders E. and Player E. 1995). Inmates come from the mainstream prison system and are volunteers. Those considered for assessment are men with persistent antisocial behaviour. Individuals with acute psychiatric illnesses are not considered. On admission to HMP Grendon, the individual will spend between 6 weeks and 4 months in the assessment unit working in small groups on everyday issues. If they are accepted into the prison they are then transferred to one of the 5 therapy wings each of which houses 40 inmates. The units are run on therapeutic community lines. The days are organised into a mixture of therapy sessions, work and recreation. There are daily small group therapy sessions lasting one and a half hours. These groups contain 10 inmates and one or two facilitators. One of the facilitators will be an officer. An individual remain in the same group throughout his stay but the group membership changes as people arrive and leave the prison. This will occur on average every 10 weeks. There are regular community meetings involving all inmates and staff on the unit. Individuals are encouraged to stay in the prison for at least 14 months. One of the selection criteria is that they must have a sufficiently long sentence for this. This is because outcome data show that recidivism falls if they stay over 12 months.

Herstedvester special institution in Denmark accommodates 130 prisoners. It offers intensive psychiatric treatment for prisoners suffering from severe personality disorders, treatment programmes for sex offenders and an acute psychiatric unit for prisoners with major psychiatric illnesses (10 beds). Psychotropic drugs are used, where required, in

combination with psychotherapy. It, like HMP Grendon, is run on therapeutic community grounds.

Condelli at al (1994) reviewed Intermediate Care Programs for mentally disordered inmates in New York State. These provide an intermediate level of clinical and rehabilative services for those inmates who need more than the outpatient services offered by prison mental health services but do not require psychiatric hospitalisation. They are provided as separate residential services within the prisons. Inmates considered for admission must have a serious mental disorder, a significant past psychiatric history and have difficulty coping with normal prison life due to their mental disorder. The programmes are jointly run by forensic mental health services and the prison. This makes it possible for health and correctional staff to work closely together. A typical unit will contain 60 inmates. Therapies provided include individual and group therapy, recreation, task and skills training, education and crisis intervention. Many prisoners will serve their whole sentence in these units. In this study they found that the Intermediate Care Programs were fulfilling their aims of reduction in disruptive and harmful behaviours, suicide attempts and the use of crisis care, seclusion and hospitalisation.

The prison surveys have shown a high incidence of substance abuse. Many of the prisoners with a mental illness have co-occurring substance abuse. There is particular interest in this dual diagnosis group as there is the suggestion that they are at greater risk of violent offending.

There are treatment programmes for mentally ill prisoners with co-occurring substance abuse in America. A review of seven such programmes in the United States (Eden et al 1997) described how many of these programmes used a therapeutic community approach. They were modified to provide (a) greater individual counselling and support (b) less confrontation, (c) smaller staff caseloads and (d) cross training of staff. Each of the units described is housed in a separate unit within a larger prison. The majority of the inmates have a major mental disorder such as clinical depression or schizophrenia, as well as a history of substance abuse. They all have an intensive period of assessment. Treatment is highly structured with between 20 and 30 hours each week spent in treatment and education programmes. These programmes involve cognitive, emotional and behavioural interventions. Relapse prevention strategies are addressed in the treatment. All the programmes reviewed have procedures for linking inmates to aftercare services.

National Health Service

It is aimed to treat seriously mentally disordered offenders in hospital rather than detain them in prisons. In Scotland between the 1 April 1997 – 31 March 1998, 75 prisoners were transferred directly from prisons into hospital care. A further 244 offenders were remanded to hospital by the courts, 30 were placed on an interim hospital order and 119 were given a sentence of a hospital order. Some of these offenders may have spent time in prison prior to their court disposal.

The Care Programme Approach

Coordination of care for those with severe mental illnesses has been made a requirement by government legislation. The government first set out its intentions for a Care Programme Approach (CPA) in the 1989 White Paper "Caring for People". This was followed in 1993 by a circular which set out the arrangements for implementing the CPA. It is a crucial element in the Government's policy for people with mental illness. It is used in the community to ensure that individuals with severe and enduring mental illness receive ongoing care and supervision.

The principles of the CPA are that:

- There will be multidisciplinary and multi-agency working;
- The CPA will be applied to those users with severe and enduring mental illness – in order that resources are targeted at those most in need;
- Users and, if appropriate, carers must be involved in the CPA
- Effective communication will exist between the professionals and agencies involved.

The main elements of the CPA are:

- A systematic assessment of the patients health and social needs;
- The drawing up a Care Programme which clearly identifies these needs;
- The appointment of a care co-ordinator or key worker to maintain regular contact with the patient and other providers of care;
- The holding of review meetings to ensure the care stated on the Care Programme remains appropriate.

The CPA should be directed at patients with a history of relapse, of serious self neglect or violence to themselves or others and those who require multiagency involvement. Feeney et al (1998) found that there was an increase in patient contacts by a factor of six and that there was a wider range of health professionals involved with those patients who had a CPA. This increase in contacts obviously has an implication for resources but if it is well coordinated it should improve the standard of care.

The CPA could be applied to mentally disordered prisoners. As noted above it has lead to an increase in contacts from different health professionals in the community. This might well be the case in prison. Mentally disordered offenders often have multiple problems (mental illness, substance abuse, social problems) which would benefit from a coordinated multiagency approach.

Service Provision

The aim stated for prison healthcare is "to give prisoners the same quality and range of healthcare services as the general public receives from the National Health Service". This was reaffirmed in the report on the Future Organisation of Prison Health Care (1999). This report noted variations in the standard of health care in prisons and recommended a partnership approach between prisons and the NHS. Mental health was identified as a weakness in prison health care. Recommendations were made as follows:

- The care of mentally ill prisoners should develop in line with NHS mental health policy and national service frameworks.

- Special attention should be paid to better identification of mental health needs at reception screening
- Mechanisms should be put in place to ensure the satisfactory functioning of a Care Programme Approach within prisons and to develop mental health outreach work on prison wings.
- Prisoners should receive the same amount of community care within the prison as outside and policies should be put in place to ensure adequate and effective communication and joint working between NHS mental health services and prisons.

This report was followed by the government giving a commitment to taking forward its proposals and again emphasis was placed on the mental health needs of prisoners.

In Health, Social Work and related Services for Mentally Disordered Offenders in Scotland (1999) the guiding principles on service delivery state that: "Mentally Disordered offenders should be cared for:

- With regard to quality of care and proper attention to the needs of individuals;
- As far as possible in the community rather than in institutional settings;
- Under conditions of no greater security than is justified by the degree of danger they present to themselves or to others;
- In such a way as to maximise rehabilitation and their chances of sustaining an independent life
- As near as possible to their own homes or families if they have them.

Policy recommendations for Mentally Disordered Offenders

Many commentators have made recommendations to improve the services for mentally disordered offenders. Petch (1996) summarises policy and developments in inter-agency working with mentally disordered offenders. He emphasises the vital role that the police, courts, prison and probation services have in the assessment and referral to specialist care of mentally disordered offenders. He states that effective care can be delivered if there are close links between agencies. Communication, co-ordination and co-operation are the key to successful management of mentally disordered offenders.

Cooke's study (1994) makes a series of recommendations for the Scottish prison service based on his results.

These include:

1. The implementation of a uniform psychological assessment procedure in all prisons.
2. The use of the Prison Behaviour Rating Scale as an initial screening instrument.
3. The piloting of the use of the Referral Decision Scale.
4. The establishment of a demonstration programme which applies the principles of intensive case management to the management of multi problem prisoners.
5. The training of uniformed staff to improve their skills in the management of psychologically disturbed prisoners.

6. That any new initiatives in the assessment, management or treatment of psychologically disturbed prisoners should be rigorously evaluated by independent evaluators.

Fryers et al (1998) point out that prison surveys such as those quoted above have shown that there are many people remanded to prison for long periods of time who have current or longstanding mental illnesses for whom effective treatment is a basic human right. There are also many men and women in prisons who present no threat to the safety of the public but who require good psychiatric treatment and long term care. This should not be in the criminal justice system. The majority of this care should be in the community. Planning this care needs close partnership between medical, social, educational and criminal justice agencies. They recommend that a government wide response is required to set up such a single professional team with a ring fenced health and social care budget.

METHODOLOGY AND RESULTS

The Methodology and Results of this research paper are presented in four sections.

The first section relates to the testing of the hypothesis that significant levels of psychiatric morbidity would be found in a prison setting.

The second section provides a description of the "Open Doors" programme.

The third describes interagency working in HMP, Barlinnie with particular reference to the "Open Doors" programme.

The final section tests the hypotheses that "Open Doors" participants have more mental health problems than controls and that participation in the programme improved their mental health.

SECTION 1: THE LEVEL OF MENTAL DISORDER AMONGST PRISONERS ENTERING HM PRISON, BARLINNIE.

METHODOLOGY

HMP, Barlinnie has a large throughput of prisoners. Many prisoners only stay overnight prior to transfer to other prisons such as HMP, Low Moss or a Young Offender Institution. Adult prisoners who are identified to have serious mental health problems or who are found to be at risk of self harm remain in HMP, Barlinnie. All adult remand prisoners are housed in Barlinnie.

To quantify the extent of mental health problems in those coming into HMP, Barlinnie an assessment interview was carried out on all admissions (receptions) in one week (119 agreed to participate, 13 refused). Receptions were identified as all those who came to the prison on remand or following a new conviction. Some of the convicted prisoners had already served a remand period in HMP Barlinnie. There were 187 prisoners who only stayed overnight prior to transfer to other institutions that were not interviewed. There were also some prisoners who remained in Barlinnie for a very short period either serving short sentences or because they returned to court and were then released (n=4). The medical notes of those who refused to be interviewed were examined for evidence of psychological morbidity.

The questionnaires used incorporated:

1. Demographic data - such as age, home address, ethnic origin.

2. Historical information – personal, family, medical, forensic, drug. The semi-structured interview used for the remand study (Davidson et al, 1995) was employed to gather this information. This was used because it is quick and effective and would allow comparison with data collected on the "Open Doors" group.
3. Alcohol assessment using the CAGE (Mayfield, 1974). This is a simple questionnaire comprising 4 questions, which gives an assessment of alcohol use. The questions are: Have you ever felt you should ***c***ut down on your drinking? Have people ***a***nnoyed you by critisising your drinking? Have you ever felt ***g***uilty or bad about your drinking? Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (***e***ye-opener). A positive response to two or more of these questions is used to indicate alcohol misuse.
4. The Clinical Interview Schedule-Revised (CIS-R) was used to assess the presence of psychological morbidity. It is a standardised assessment schedule for detecting minor psychiatric disorder in research settings. It does not rely on expert judgement to detect psychiatric illness. The CIS-R was chosen because it is simple and quick to use and it allows comparison with other research papers. The CIS-R contains 14 sections which each cover a different area of symptoms.

Somatic symptoms	Fatigue
Concentration and Memory	Sleep problems
Irritability	Worry about physical health
Depression	Depressive ideas
Worry	Anxiety

Phobias	Panic
Compulsions	Obsessions

Each section begins with a number of compulsory questions, which establish the presence of a particular symptom in the past month. If there is no evidence of the symptom the rest of the section is omitted. If it is present the remaining questions are asked. It takes about 20 minutes to complete depending on the number of symptoms present. The CIS-R only measures current symptoms. The questionnaires used did not measure lifetime incidence of mental disorder. From the CIS-R it is possible convert the results to give ICD 10 diagnoses.

5. The Schedules for Clinical Assessment in Neuropsychiatry (SCAN) Part 2 were used to assess psychotic symptoms. This was chosen because it is straightforward to use by trained clinicians and the results can be compared to other surveys. Like the CIS-R each section starts with one or more compulsory questions. If there is no evidence of the symptoms the rest of the section is omitted.
6. Intelligence was assessed using the Quick Test (Ammons and Ammons, 1962). This is a brief intelligence test using verbal skills. The individual is asked to point to one of four drawings that a word could apply to. There is a list of 50 words ranging from easy to difficult. Two word and picture sets were used for each participant. The score is then matched to intelligence quotient (IQ) using a standardised table. It should be noted that the score is influenced by educational attainment and this population have a poor level of education.

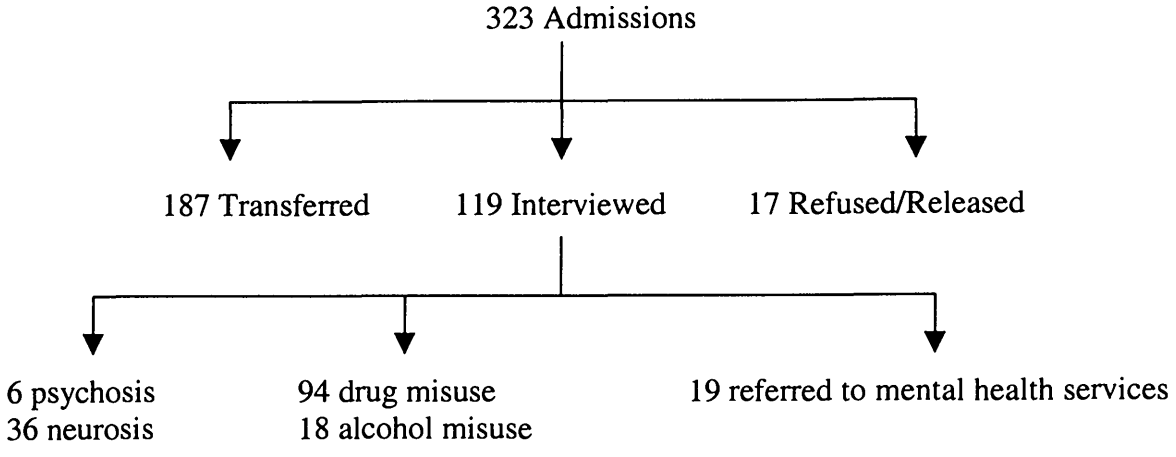
The prisoners admitted during the study week were followed up after five months to see which prisoners had been referred to "Open Doors" and other mental health services

within the prison. Referrals to psychiatrists were looked at by checking through the medical notes of the 119 prisoners. This was cross checked by requesting a list of names of those who had letters written about them from the psychiatrists. The list of names with prison numbers was given to the drug and alcohol workers, education unit, drug units and cognitive skills course co-ordinator. Any prisoners that they had seen or had been referred were noted.

Statistics

The results were analysed by dividing the prisoners into two groups, remand and convicted. For categorical data this was analysed using the chi squared test, normally distributed continuous data was analysed using the t tests and non normally distributed data using the Mann-Whitney U test.

RESULTS



Case Example 1

Prisoner A, age 28, was interviewed the morning after admission to the prison. He had spent a night in police custody following his arrest and prior to appearing in court. He had been remanded for one week and was charged with driving while disqualified. His parents were divorced and he had spent time in foster care, children's homes and List D schools. He had no qualifications and had never worked. He was single and had been staying with friends prior to his arrest. He had seen a child psychiatrist because of behaviour problems. He had over 10 convictions for car related crimes and had spent about 8 years in prison. He had been dependent on heroin for the past 3 years. He looked emaciated, pale and tired. He was complaining of aches and pains, tiredness, poor concentration, and insomnia over the past two days secondary to withdrawal from heroin. He had no symptoms of depression or anxiety.

At interview he scored 8 on the CIS-R (≥12 represents psychiatric morbidity). He did not fulfill ICD-10 Criteria for any illness. A diagnosis of heroin use was recorded.

Demographic Characteristics

Two thirds of those interviewed came from the Glasgow area. Fifteen percent were from Ayrshire, 6.7% from Lanarkshire and the remainder from other areas of Scotland.

Twenty-eight percent were aged between 21 and 25, 30% between 26 and 30, 18% between 31 and 35, 11% between 36 and 40 and 13% were 40 or above.
The average age was 31.2 years (median age 29, range 21-62 years).

Over one third of their parents were divorced or separated. Three quarters were brought up in the family home, 11% had spent time in children's homes and 12% in List D schools. Fifty five percent had been excluded from school.

Three quarters had no qualifications, 22% had standard grades or equivalent and 4% had highers or above.

Over half were single, 22% were living with their partner, 14% were married, 5% were divorced and 5% separated. Sixty one percent had children.

Eleven percent had never worked, 72% had had employment in unskilled manual jobs and 14% had worked in skilled manual jobs. There was one engineer and one restaurant manager.

Four percent owned their own home, 13% lived in a private tenancy, 42% in council owned property, 5% in a hostel, 29% with a family member and 6% were homeless.

Offending History

Sixty three (52.9%) of the sample were on remand, the remaining 56 (47.1%) were convicted.

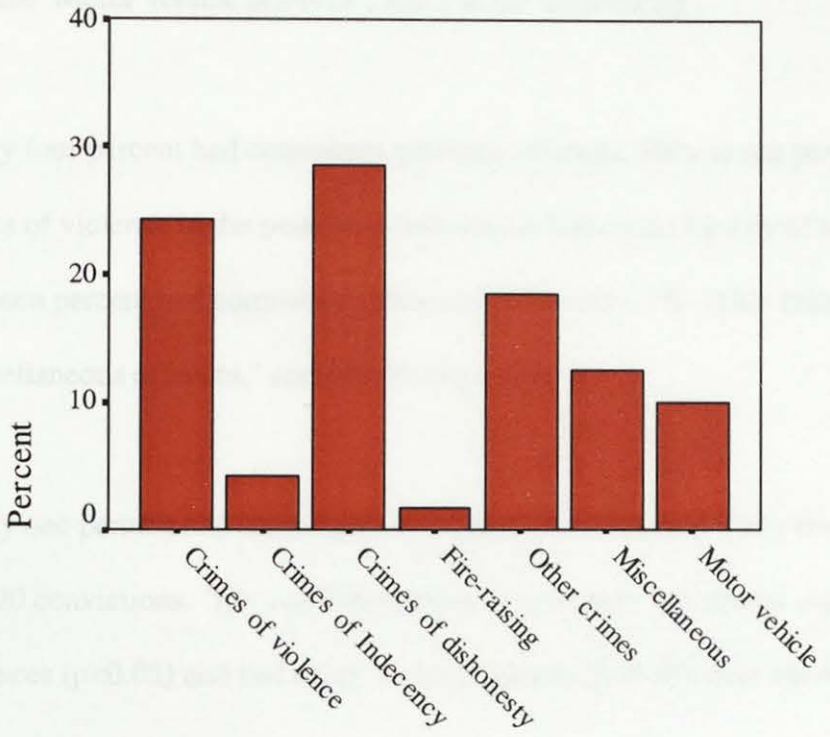


Figure 2.1: Charge/conviction receptions

Key: Crimes of violence: e.g murder, culpable homicide, carrying an offensive weapon.
Crimes of indecency: eg rape, indecent assault, lewd and libidinous behaviour
Crimes of dishonesty: e.g housebreaking, theft of a motor vehicle, shoplifting and fraud.
Other crimes: category includes perjury, resisting arrest, bail offences and misuse of drugs.
Miscellaneous offences: includes breach of the peace and drunkenness.
Motor vehicle offences: includes dangerous driving, drunk driving, speeding and driving while disqualified.

The classification of type of crime is that used by the Scottish Office for statistical purposes.

The largest proportion (29%) of the surveyed prisoners were charged with/ convicted of 'Crimes of dishonesty'. Twenty four percent were in prison for 'Crimes of violence', 4% for 'Crimes of indecency', 18% for 'Other crimes', 13% for 'Miscellaneous offences', 10% for 'Motor vehicle offences', and 2% for 'Fireraising'.

Eighty four percent had committed previous offences. Fifty seven percent had committed crimes of violence in the past. Two individuals had a past history of sexual offences. Fourteen percent had committed crimes of dishonesty, 7% 'other crimes' and 'miscellaneous offences,' and 4% driving offences.

Eighty one percent had served previous custodial sentences. Forty five percent had more than 20 convictions. The convicted group of prisoners had served significantly more sentences ($p<0.05$) and had spent longer in prison ($p<0.05$) than the remand group.

Twenty one percent had spent no time in prison prior to this occasion, 24% had spent under 1 year, 18% had spent between 1 and 5 years and 37% had spent over 5 years in prison. Nineteen percent had no previous sentences, 55% had served between 1 and 10 sentences, 16% between 10 and 20 and 10 % had served over 20 sentences.

Past Psychiatric History

Sixty four percent had no previous psychiatric contact. Of those who had received psychiatric care 7.6% had been inpatients, 24.4% had had outpatient contact and 4% had seen a psychiatrist for a court report.

Sixteen percent had a history of deliberate self-harm. In 12 individuals (10%) there had been more than one attempt at self-harm. Six (5%) had self harmed on over 10 occasions.

Ninety one percent were prescribed no psychotropic medication. (that is drugs used to treat mental illnesses). Six (5%) individuals received antidepressants and four (3.6%) antipsychotic medication.

Twenty three percent were on medication to manage their withdrawal from drugs and alcohol. This had been prescribed following their admission. Those withdrawing from heroin and benzodiazepines were prescribed lofexidine and chlordiazepoxide. Those withdrawing from alcohol were prescribed chlordiazepoxide.

Twenty three percent had a family history of psychiatric problems. The majority of the family problems were drug or alcohol related. Four prisoners (3.4%) had a family member who suffered from a psychotic illness such as schizophrenia.

Case Example 2

Prisoner B, age 32, was interviewed the day following admission. He had been remanded into custody for two weeks and was charged with assault and breach of the peace. His parents divorced when he was 14. He had no qualifications. He had been working in a factory prior to his arrest. He was married with 2 children. He lived in a private tenancy with his family. He saw a psychiatrist after he had cut his wrists a few months ago. He had over 10 convictions for assaults and car thefts. He had served 6 sentences and had spent a total of 16 months in prison. He did not drink and occasionally smoked cannabis.

He complained of stomach pain from an ulcer. This was made worse by stress. He had longstanding problems with his memory. He was often irritable and depressed. He felt hopeless about his future. He described being worried and anxious for over 2 years. He had had occasional panic attacks over this time including one in the past week.
He scored 29 on the CIS-R. He fulfilled ICD-10 criteria for depression and panic disorder.

Current Psychiatric Diagnosis

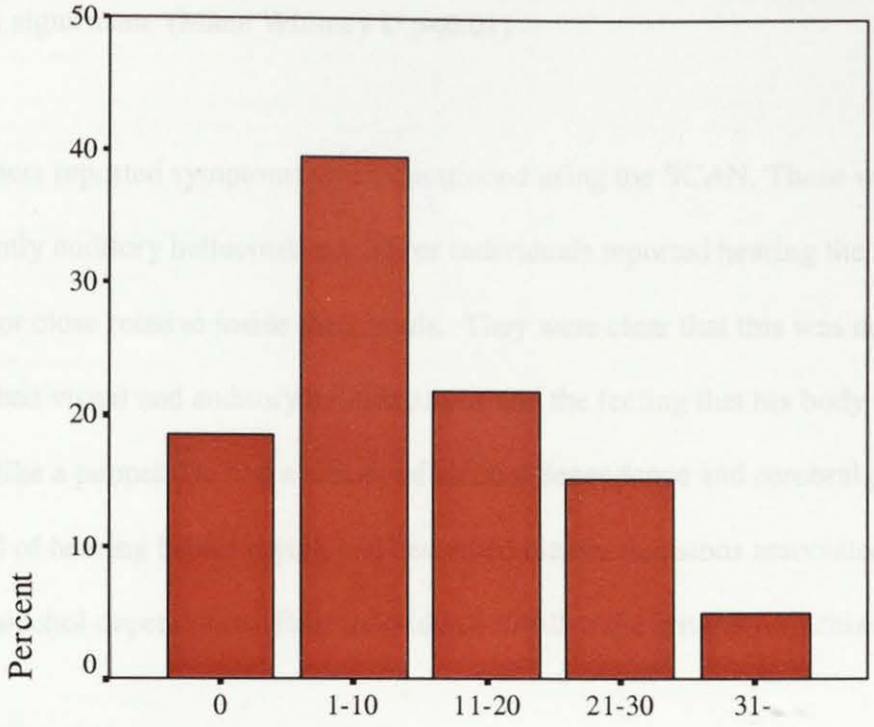


Figure 2.2: Total CIS-R scores

The scoring distribution was as follows: 18.5% scored zero; 39.5% scored between 1 and 10; 22% between 11 and 20; 15% between 21 and 30; and 5% over 30.

Forty one percent of prisoners scored over 12 on the CIS-R. The overall threshold score for significant psychiatric morbidity is 12. Fifty two percent of remand prisoners and 29% of convicted prisoners scored above this level.

	N	Median
Remand	**63**	**12.0**
Convicted	**56**	**5.5**

Table 2.1: CIS-R scores for remand and convicted prisoners

The difference between the remand and convicted prisoners total CIS-R score was statistically significant. (Mann Whitney U $p<0.01$)

Nine prisoners reported symptoms when questioned using the SCAN. These were predominantly auditory hallucinations. Three individuals reported hearing the voice of a dead child or close relative inside their heads. They were clear that this was not real. One described visual and auditory hallucinations and the feeling that his body was controlled like a puppet. He had a history of alcohol dependence and cerebral palsy. One complained of hearing babies crying and described bizarre delusions associated with low mood and alcohol dependence. Four individuals fulfilled the criteria for schizophrenia.

Using the CIS-R and the SCAN to arrive at an ICD diagnosis excluding drug or alcohol use:

- 5% of the sample had a psychotic illness. This included 4 individuals with schizophrenia, one with psychotic depression and one with an organic delusional disorder (Psychosis is used here to describe the presence of symptoms such as hallucinations and delusions.);

- Twenty one percent satisfied the diagnostic criteria for depression;

- 10% had anxiety disorders.

ICD 10 Diagnosis	N	%
Psychosis	6	5.0
Depression	24	20.2
Mixed anxiety + depression	1	0.8
Generalised anxiety	4	3.4
Phobias	4	3.4
Panic	2	1.7
No diagnosis	78	65.5
Total	119	100

Table 2.2: ICD10 Diagnosis

Twenty-seven (43%) of the remand sample and 14 (25%) of the convicted fulfilled ICD 10 criteria for a psychiatric illness ($p<0.05$).

There were 4 (6.3%) remand and 2 (3.6%) convicted prisoners with a psychotic illness.

Substance misuse

Information was obtained on lifetime history of illicit drug and alcohol misuse. Only 18.5% had no evidence of drug or alcohol misuse. Of this 18.5 %, 10 (8.4%) individuals had no psychiatric symptoms, 7(5.9%) were depressed and the remaining 5 (4.2%) were suffering from anxiety disorders.

Seventy nine percent had abused illicit drugs. Thirteen percent had abused alcohol.

Fifty eight percent had used heroin.

Forty two percent had used drugs intravenously.

There was no difference between the remand and convicted groups in terms of drug or alcohol misuse.

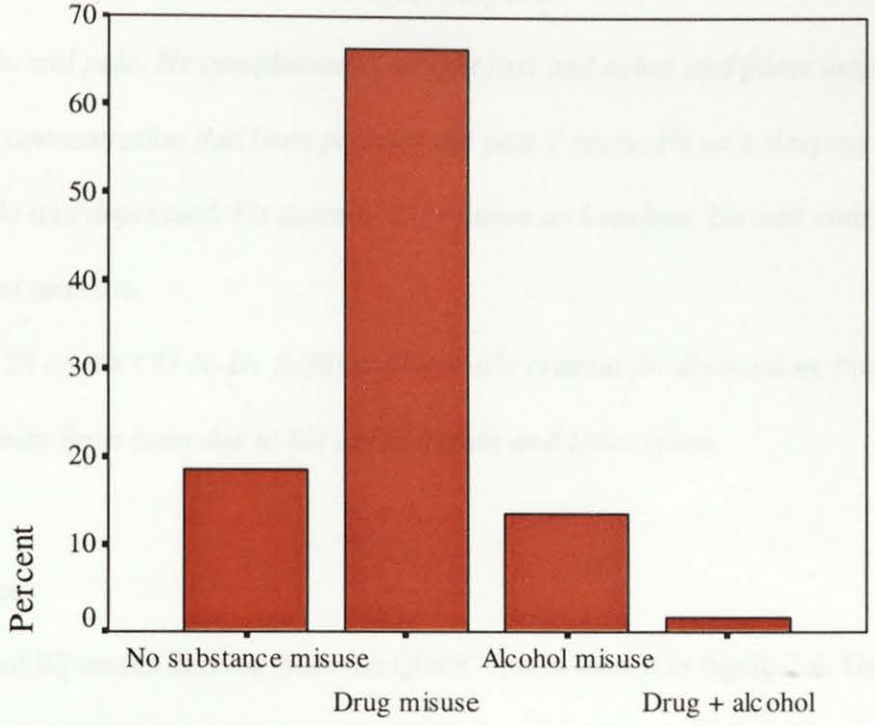


Figure 2.3: Drug/Alcohol Misuse

Four had been taking methadone prior to imprisonment.

Twenty nine had been prescribed medication to treat their withdrawal symptoms from alcohol or drug dependence.

Case example 3

Prisoner C, aged 27, had been given a 6 month sentence for shoplifting. He was brought up by his parents who were both dependent on alcohol. He had no qualifications and had never worked. He was single but had two children. He was homeless. He was seen by a psychologist as a child for behavioural problems. He had harmed himself on 4 occasions by cutting his wrists and taking an overdose. He had over 20 convictions. The most

serious offence was for assault and robbery with a weapon. He had spent 8 years in prison. He was dependent on heroin and temazepam.

He was thin and pale. He complained of weight loss and aches and pains made worse by stress. His concentration had been poor for the past 2 years. He was sleeping badly. He felt irritable and depressed. He described his future as hopeless. He was constantly worried and anxious.

He scored 25 on the CIS-R. He fulfilled diagnostic criteria for depression, however, his symptoms may have been due to his use of heroin and temazepam.

Intelligence

The range of IQ scores derived from the Quick Test is shown in figure 2.4. One prisoner refused to complete the test.

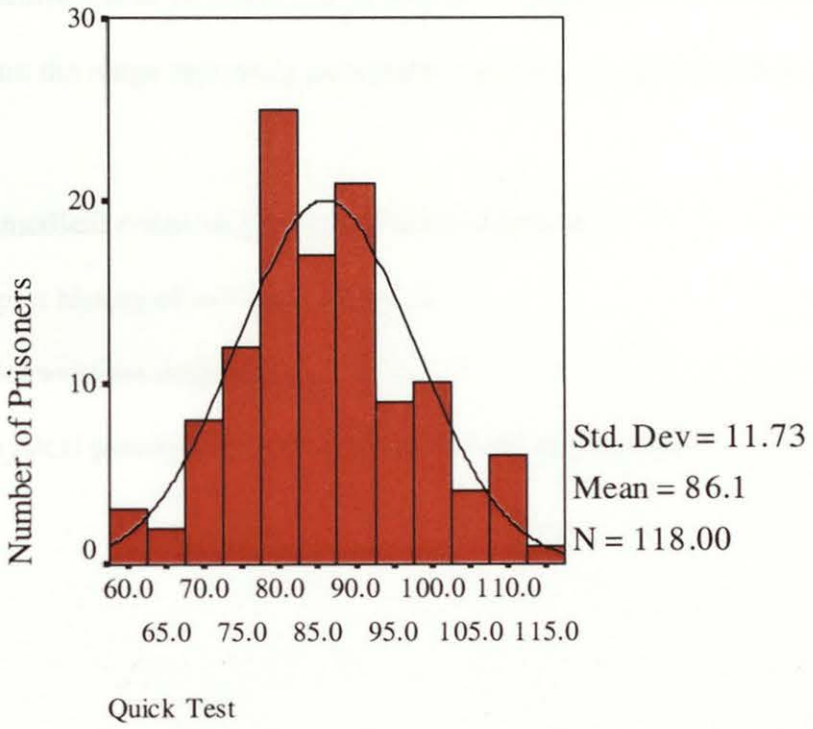


Figure 2.4: Quick Test Score with Normal distribution Curve

The histogram shows that the mean IQ measured with the Quick Test is 86.1. In a normal population the mean IQ is expected to be 100. This indicates that the interviewed population had a lower IQ than would be expected. However it must be noted that the Quick Test measures verbal IQ only. As has been noted this group has poor educational attainment (74% had no qualifications). The Quick Test does not take this into account. This may cause the results to be lower than would be expected. However bearing in mind this caveat 11% scored below 70 on the IQ test which places them in the mild learning disability range.

Remand vs convicted prisoners

The only significant differences between the remand and convicted prisoners were on measures of mental ill health. Forty three percent of the remand sample and 25% of the convicted fulfilled ICD 10 criteria for psychiatric illness and 41% and 29% respectively scored within the range indicating psychiatric morbidity using the CIS-R ($\geq$ 12)

Review of medical notes on 13 who refused interview

One had a past history of self harm recorded.

Two were intravenous drug addicts.

One had physical problems of epilepsy and pernicious anaemia.

Follow up Details

On admission 11 prisoners were placed in the Healthcare Centre for the following problems:

Psychosis (1)

Depressive illness (1)

Alcohol withdrawal plus depression (2)

Withdrawal from drugs (3), one of whom also fulfilled criteria for depression

Obsessive compulsive disorder (1)

Physical problems (3) - insulin dependent diabetes, angina and arthritis, one of whom was also depressed.

None of these individuals saw a psychiatrist. Seven had harmed themselves in the past. Two were taking antidepressants. One was prescribed antipsychotic medication. Five were on medication to treat symptoms of withdrawal.

At follow up 5 months after admission of the 119 prisoners interviewed:

Two prisoners had been referred to "Open Doors", one of whom had a diagnosis of drug dependence on admission and the other of depression with drug dependence.

Two prisoners had been interviewed by a psychiatrist and there had been a verbal consultation concerning one other. The two who were seen were found by the survey at

admission to be withdrawing from drugs and alcohol. One of these prisoners was also seen by "Open Doors".

Three had been referred to drugs workers and one had been seen by alcohol services.

Three had been referred to drug workers and one had been seen by alcohol services.

One had attended the cognitive skills course.

Eleven had attended the education department.

There was only one prisoner who was seen by more than one agency.

28 of the surveyed prisoners and 6 of those who had refused an interview remained in HMP, Barlinnie after 5 months. 16 of those interviewed and 1 of those not interviewed were in other prisons at this stage.

SECTION 2: THE "OPEN DOORS" PROGRAMME

This chapter describes the "Open Doors" programme. It lists the aims and objectives of the programme. It provides an overview of the staffing and the methods used to achieve the aims. It highlights problems with the programme.

METHODOLOGY

All the written materials from the programme were examined. This included: an MSc Thesis (1994); a report on the programme by the then Unit Manager (1998); referral forms; assessment forms; advertising materials and overheads used in groups.

Semi-structured interviews were held with the programme's staff and manager (n=4). Areas addressed in the interviews included training, previous experience, length of service, professional development and supervision as well as their role in the programme, their views on the programme's aims, the nature of referrals seen and any practical problems encountered. They were asked how they would like the programme to develop in the future and if they had ideas that would improve the problems they identified. They were asked about relationships with other staff groups in the prison.

Information on how the programme is delivered was collected. This included: location; equipment and resources available to staff; source of referrals; duration of intervention; number of sessions undertaken; length and frequency of sessions; recording and reporting

methods; the type of service delivered (group work, individual or both); the number of sessions completed; completion rates; reasons for non-attendance and non-completion.

"Open Doors" staff were asked weekly for names of new referrals to the programme. Initially a list was drawn up of all those involved in the programme. The questionnaires were piloted on a sample of those already involved. Subsequently information was gathered from programme notes and semi-structured interviews with participants (n=55) on the source of referrals. As a further check a letter was written to the "Open Doors" staff asking if they were aware of any other cases who had not been seen by the researcher. An additional 35 names were provided. Six of these had been taken on for individual work, 13 had been seen on one occasion and 16 had no notes. It was difficult to see from the existing case notes that all were "Open Doors" cases rather than social work cases as no "Open Doors" referral or assessment form was available (n=19). One worker was unable to provide a complete list of names or details.

Group sessions were attended and their purpose and functions were discussed with the group worker. In the interviews with other staff members and participants comments about the programme, including groups, were asked for and noted.

RESULTS

Aims and Objectives of the "Open Doors" programme

The main aim of the programme is the promotion of positive mental health in HMP, Barlinnie.

The current stated objectives are:

1. Assessment of all referrals and determination of the appropriate intervention
2. To assist individuals in understanding their mental health problems.
3. To raise self esteem and improve coping skills
4. To address offending behaviour and recidivism.
5. To offer throughcare and community care packages.
6. To develop effective communication within the prison and the community.

These objectives are to be fulfilled by a combination of individual, group and multidisciplinary working.

Historically diversion from custody was one of the objectives of the programme. This is no longer the case. The other changed objective is personal skills training. In the past this included employment training which is no longer part of the programme.

Staffing

"Open Doors" has 3 staff members. They consist of a trained social worker who works part time (25 hours) and 2 full time social work assistants. The original plan for the programme was to have staff from different backgrounds to aid with multidisciplinary working. There is funding for an administrative post. This has been unfilled throughout the study period. It is planned to appoint someone to this position in the next few months.

Staff member	1	2	3
Training Background	Social work training 1965	Social work assistant in community working with elderly	Social work administration
Training since commenced working for "Open Doors"	Conferences	Groupwork course Counseling course Alcohol course	Mental Health awareness course. Shadowing – social work, psychiatric inpatient unit, community psychiatric nurse.
Training during evaluation period	Child protection training course 4 'Forensic Club' meetings	3 'Forensic Club' meetings	3 'Forensic club' meetings
Length of Experience	12 years in community and prison social work	15 years in active social work	17 years in social work department administration
Length of service in HMP, Barlinnie	5 years	8 years	1 year
Main role for "Open Doors"	Assessment Individual work and support of prisoners	Assessment Individual and group work, and support of prisoners	Assessment Individual work and support of prisoners

Fig 2.1: Table Staffing

Forensic club meetings are organised by Scottish forensic psychiatrists. They rotate around different forensic units. A £10 fee is charged to cover the cost of lunch for an all day meeting.

Due to staff shortages in the social work department all workers have taken on other duties not related to "Open Doors". They estimate this work takes between one and two sessions per person each week. However, at times this can be of benefit as they have identified suitable cases for "Open Doors" from these contacts.

Other Duties

1. Providing social work cover for D hall excluding the Sex Offender Unit. D hall consists of four units each holding 50 prisoners. The four units perform specialised functions: the High Dependency Unit takes prisoners who are unable to manage in the other halls due to physical or mental health problems; the Drug Support Unit accepts prisoners with addiction problems; the Sentence Planning Unit caters for prisoners serving over 3 years; and the fourth unit is the Sex Offender Unit.
2. The main role for social work staff on D Hall is helping prisoners to maintain family and community ties. This includes working jointly with prisoners and their families. They also help with accommodation and benefit issues when a prisoner's personal officer requests assistance.
3. The allocation of prisoners who are the subject of supervised release orders or require reports for the parole board.
4. Answering and dealing with social work duty calls. Social work duty calls include referrals by families and other agencies with concerns for inmates. This involves

interviewing the prisoner and ensuring that other people in contact with him are aware of the concerns.

Management

Management and supervision are provided by a senior social worker in the prison's social work department. This social worker has worked in HMP Barlinnie for the past 10 years and previously in Greenock prison. She has experience of working in hostels for the homeless in Glasgow.

There is a weekly allocation meeting. This is also designed as a forum to discuss cases. No minutes or records are kept of this meeting. The senior social worker is available to discuss cases on an as required basis.

Formal supervision looking at personal development and training requirements is rare. Last year a staff member went on a compulsory course updating knowledge on child protection.

Administration

The full time administration position has been unfilled throughout the study period. There is a separate referral sheet for "Open Doors" (see Appendix). This is used mainly by other social workers as most other referrals are verbal. There is an assessment form (see Appendix) for people referred to the programme which includes referral details and the focus of concern. This form is kept with all other notes in the normal social work

files. There is a separate card index for "Open Doors" cases. This is incomplete and many cases do not have a card. Cards are completed by an administration worker when a set of case notes is made up on request by the "Open Doors" worker. This worker is employed in the social work department but not officially by "Open Doors". If a set of case notes already exists a card is filled in when the administration worker is notified.

Note keeping is variable in quality. One staff member rarely records anything. This includes the completion of the initial assessment form. This creates problems when people are absent due to holidays or sickness as there is no list of people involved in the programme and no details of the focus of ongoing work.

No records are kept of the groups including attendance, reasons for cancellation or topics discussed.

Location

The 3 "Open Doors" staff share an office within the social work department in HMP Barlinnie. They keep their notes on current participants in filing cabinets in this room. They do not have a computer, access to the Glasgow social work computer network or to the Scottish Prison Information Network (SPIN). The unit manager of the social work department does have SPIN access in her office.

Prisoners are seen in the halls either in the social work interview room or in their cells. Other agencies also use these interview rooms so there is sometimes difficulty seeing

prisoners especially if they attend work placements as other staff may be using the rooms. All prisoners in a hall in HMP Barlinnie go to work at the same time. This means that they are only available for interview during the half of the day that they are not working. Any other staff wishing to see the prisoners on that hall can also only see them at this time. Staff are able to use the agents' interview rooms in the new visitor complex but complain of their lack of soundproofing and hence confidentiality. Discussion on the use of the special/family visit area has taken place but this has been difficult to arrange to date as discipline staff must be present.

In the main halls the interview rooms are converted cells close to the hall desks. For safety purposes the doors are incompletely shut during interviews. This causes problems with noise and confidentiality. The renovated hall (D hall) has interview rooms in each of the units which are private and away from the main desk. A personal alarm is provided in these units to ensure staff safety. Letham hall is able to use recreation rooms for interviews. Interviews are interrupted regularly by staff and passmen because the rooms have more than one purpose such as storage.

Groups are held in the social work unit staff room. This is furnished with upholstered chairs and a round coffee table. It is a non-smoking building but prisoners are allowed to smoke during groups. It is used by social workers for departmental meetings and for eating lunch. There are tea and coffee making facilities and a toilet.

Equipment and Resources

Equipment for the groups is provided in the social work unit. There is a television with video and an overhead projector. The art group uses paper, paints and crayons and has worked with clay in the past. A community artist was employed to come and work with the prisoners for 12 weeks last year. This stopped due to lack of resources to pay his fees.

Referral Details

Referral criteria

There are no specific referral criteria. The programme considers that mental disorder should be considered as broadly as possible. This means that they accept referrals of people who are struggling with prison life as well as people who have more obvious mental health problems. They will see everyone who is referred to them for assessment. This lack of definition was raised at many of the interviews held with other staff groups. A frequent comment was they did not know who to refer and therefore did not refer people who might benefit from "Open Doors" input.

Source of referrals

Fifty five full participants in the "Open Doors" programme were interviewed and asked who had referred them to the programme during the evaluation. This was confirmed by looking at their notes. These were participants who had been referred between 14 May 1998 and 31 March 1999.

Nine percent were seen and referred by "Open Doors" workers either because they knew them from a previous sentence or because they interviewed them when performing other social work duties. The other referrals include three from the psychiatrists and one from the medical officer.

Table 2.2 lists the referral details of those assessed by the programme but who were not full participants (n=35). No referral details were found for 10 prisoners. For 6 prisoners there were no notes but the front sheet of the assessment form was available.

Referrer	Research participants		Non participants	
	N	%	N	%
Self	22	40.0	3	8.6
Prison officer	8	14.5		
social worker	12	21.8	7	20.0
Nurse	3	5.5	6	17.1
Other(psychiatrist/medical officer/CPN)	5	9.1	6	17.1
Open doors Worker	5	9.1	3	8.6
No referral information			10	28.6
Total	55	100	35	100

Fig 2.2: Table Referral details

The participants were asked where they had heard about "Open Doors". The results show that nearly half (47%) had previously attended the programme.

Source of information	N	%
Previous attendance	26	(47.3)
Social worker	11	(20.0)
Prison officer	6	(10.9)
"Open Doors" worker	4	(7.3)
Nurse	1	(1.8)
Other (Psychiatrist/Medical officer/CPN)	4	(7.3)
Other inmate	2	(3.6)
Written information	1	(1.8)
Total	55	(100.0)

Fig 2.3: Table Information about programme

Outcome of Assessment

Thirteen individuals were seen for assessment only. Two participants were seen for childcare and accommodation issues only. Fifty nine were taken into the programme. There was no information on 16 individuals.

Outcome of Assessment	N	%
Assessment only	13	14.4
Childcare and accommodation issues	2	2.2
Taken into programme	55 +4	65.6
No Information	16	17.8
Total	90	100

Fig 2.4: Table Outcome of assessment

Service Delivery

The largest number of prisoners were seen by the group worker (28). The individual workers saw 15 and 11 individuals.

	Individual	Group	Individual + Group
Worker 1	8		7
Worker 2	2	13	14
Worker 3	9		2

Fig 2.5: Table Participation details

Sixty three per cent of those interviewed attended groups. Seventy three percent had individual sessions. Thirty six percent attended both individual and group sessions. None of the 55 interviewed changed workers. One individual was seen by 2 workers for joint sessions. Two of those who were not interviewed did change workers for individual work.

Nine (17%) individuals shared a worker. They would see one staff member individually and another for the group work.

There appeared to be a natural bias for the group worker to invite his "Open Doors" participants to join group sessions.

Individual work

Forty two participants were seen for individual work. The majority of individual sessions were weekly. Individuals were seen more frequently at times of crisis up to 3 times per week or more if further information became available. As an individual needed less support the sessions were decreased in frequency. They were made aware that they could ask the discipline staff to contact their worker if required. Twenty one individuals were

seen weekly throughout their contact with "Open Doors". The length of contact varied from a few days up the 10.5 months of the study period.

Number of Sessions	n
Less than 10	9
10-20	8
Over 20	9
Unknown (seen at prisoners request)	16
Total	42

Fig 2.6: Table Number of individual sessions

Sixteen prisoners who reported having individual sessions with the staff member running the groups requested individual sessions when they felt they needed them. None reported regular sessions. These prisoners did not have notes to quantify how often they had been seen.

The only reasons found for non-completion of individual work was the sudden transfer of prisoners to other prisons or in one instance the granting of interim liberation. This included an individual who disclosed sexual abuse and was transferred the next day. There are no formal outcome measures used. When a case is closed a closing summary is sometimes written.

Groups

Remand prisoners were able to attend one group. This was because remand and sentenced prisoners were not allowed to mix. They also face different issues.

Convicted prisoners were eligible to attend 3 groups at the beginning of the research. This was reduced to 2 groups following the start of time-tabling when "Open Doors" staff

said it became more difficult to obtain staff to run the group or prisoners to take part. (Time-tabling is the name given to the plan to ensure that more prisoners have work placements. There were not enough employment spaces for all prisoners and because of the need to get prisoners out of cells some workshops had more prisoners than they were designed to take or than the product required. By time-tabling work, prisoners are regularly working 20 hours per week or half of each day. The residential halls are time-tabled to work either mornings or afternoons, Monday to Friday.) Other prisoner programmes take place outside working hours. Both convicted groups were taking place outside the working day, one on Wednesday evening and one on Sunday morning for the last 4 months of the evaluation.

Selection Criteria for Groups

There were no selection criteria for the groups. The groups were therefore made up of a diverse spectrum of prisoners. Some were suffering from major mental illness, others from severe personality disorders and others were having difficulty adjusting to prison life.

Nine participants moved from the remand group to the convicted groups following conviction. This was an important function of the groups as it is often when prisoners move halls that they lose contact with supports that have been established.

Seventeen convicted prisoners attended more than one group. Two prisoners reported that they had left the support groups as they did not like to talk but they continued to attend

the creativity group. One prisoner reported having his attendance cut from one of the groups. He asked to come back to the second group and was allowed to do so.

Structure

Each group contained between 8 and 12 participants. The groups lasted approximately one and a half hours. There were often delays in starting a group. This could be because the officer required to attend the groups needed to be released from hall duties. They took place in the staff room of the social work department. There were frequent interruptions from the telephone during daytime groups. There was no specific beginning or end to participation. Prisoners joined and left as they moved through the prison system or were released. The two weekday groups were unstructured open support groups.

Simple games were used at the beginning of the groups such as the throwing of a soft ball. This was aimed at relaxing the participants and helping them to learn each other's names. After this the group members were encouraged to talk about their problems. There was a tendency for one of the participants to hold the floor during the groups giving the others no opportunity to discuss their problems. This was not always the same participant. Some group members remained silent throughout their attendance. There was occasional use of overheads by the group leader. These explained stress, anxiety and depression.

The weekend group was an art group. There was a community artist employed for this for three months last year. He helped the prisoners to model with clay. The group room was

not ideal for art work as there are few flat surfaces. Without the community artist the participants were encouraged to draw or paint as they wish. Most enjoyed this time to do something creative. They did not discuss their artwork or its meaning to them.

Notes and outcome data

There were no notes kept about the groups and no outcome measures used. The majority of participants attended groups throughout their time in HMP Barlinnie.

Prisoners requiring more support were supposed to attend more groups. In practice it seemed that the only criteria for leaving a group was leaving HMP, Barlinnie. All nineteen group participants who have left Barlinnie continued to attend until they were released or transferred. "Open Doors" workers said it was difficult to discharge a participant due to the lack of other facilities for them to move on to.

Staffing

Only one of the Open Doors staff ran groups. This meant that the groups did not take place if this worker was on holiday or unwell. There was always an officer present during the groups for security. Some officers attended regularly and became accepted and active participants. Others came on a one off basis and sat in silence. No training was given to the officers regarding their role.

In the past other staff members used to attend the groups regularly. A forensic community psychiatric nurse from Leverndale Hospital used to attend the Wednesday afternoon groups. During the evaluation he attended a few groups. The remand hall social

worker attended the remand groups. This has stopped because she has changed jobs and no arrangements have been made with the new worker.

Cancellation of Groups

Throughout the study period many of the groups were cancelled. Prisoners reported that this affected up to half the groups. Unfortunately there was no objective record of this as a formal attendance sheet was not kept. Groups were cancelled if there is no officer available or if the "Open Doors" worker was away. There was no system to let prisoners know if a group was cancelled. This was frustrating for them as they looked forward to the sessions. Three prisoners reported that they had not been taken to the group on one occasion. They attributed this to the officers forgetting to take them.

Participant and Staff Evaluations of Groupwork

Group Participants (n=27)

Group participants were asked to give their opinion about the groups. The majority (n=25) were very positive about the groups. Only 2 of those interviewed stopped going to the groups as they found the lack of structure difficult. The participants who had had the number of groups they attended reduced or were waiting for a place on return to prison after a period of liberation all wanted to come back.

Most recommended there should be more groups. They suggested there should be more structure to the groups and perhaps more activities. Several participants recommended that other staff members should attend and felt it would be a useful forum to have

speakers. They felt inviting people from the community to talk, especially about adaptation to life after a period in prison could be very helpful.

Staff (n=21)

Feedback from staff was less positive. Most staff were unsure what the function of the groups was and hence who should be referred. Prison officers in particular felt there was little point to them. They saw them as times when prisoners were given special privileges. They were allowed time out of their cells relatively unsupervised and in the past had had access to free telephone calls. The prisoners who attended were often unpopular prisoners who created trouble in the halls.

Even other social work staff including fellow "Open Doors" staff were unsure about what happened in the groups and the reason why some prisoners were taken on for groups while others were not.

SECTION 3: INTER-AGENCY COLLABORATION

The contacts that "Open Doors" has with other agencies within the prison and in the community are described in this chapter. Effective communication is a stated aim of the "Open Doors" project.

METHODOLOGY

Semi-structured interviews (see appendix) were carried out with staff from various disciplines: medical (n=1), nursing (n=3), alcohol counselling service (n=1), drug counselling service (n=2), prison officers (n=8), education (n=1), social work (n=3), psychiatry (n=1), community forensic psychiatric nurse (n=1).

At the time of the interviews there was one full time medical officer. The nurses interviewed comprised the mental health team. The manager of the Health Care Centre who was responsible for the development of nursing services was interviewed. The head of the alcohol services was interviewed. The two drug counsellors were the only fulltime individual drug workers in the prison. Members of staff from the Drug Rehabilitation Unit and the Drug support Unit were also interviewed. The head of the education department was interviewed. A sample of prison officers from the different halls were interviewed. The officers interviewed all knew about "Open Doors" and had had contact with the staff. They were therefore a biased sample as many of the officers talked to

when interviewing prisoners did not know about the programme although many knew the staff involved. Information was gathered from these informal contacts.

The interviews included details of their contacts with "Open Doors", any problems encountered and suggestions for improvements.

Programme participant interviews included questions about involvement with other agencies or workers. This was then confirmed with the workers named.

Information about different agencies within the prison

The Mental Health Team comprised 2 nurses at the beginning of the evaluation. They co-ordinated the treatment of prisoners identified as having mental health problems with the medical staff and the psychiatrists. They were required to work the nursing shift system and to do night duties. There is now a different structure in place. In this each residential hall has an identified mental health team nurse who is psychiatrically trained. This nurse is responsible for the assessment of referred prisoners and, if appropriate, referral onwards to medical and psychiatric staff. They also monitor prisoners with known mental health problems. They continue to have responsibility for the other nursing duties on the hall and to work shifts. There is a mental health team co-ordinator.

There are now two full time medical officers. Other medical cover is provided on a sessional basis.

Psychiatric services come from Leverndale hospital. A consultant psychiatrist visits the prison for two sessions each week. He is accompanied by one specialist registrar and at times there is a second specialist registrar.

One forensic community psychiatric nurse has visited HMP Barlinnie throughout the research for two sessions each week. A further 4 sessions will be provided by the newly appointed forensic community psychiatric nurses.

Alcohol services are provided by two fulltime and one part time counsellors.
Education is a valuable resource for mentally disordered prisoners. It provides a wide range of classes from yoga and art to computer literacy. Eight of the interviewed prisoners attended the education department.

The Drug Rehabilitation Unit (DRU) offers a 4 week full time residential group programme for prisoners to work with their drug problems. It takes 10 prisoners at a time. They try to take prisoners in the last three months of their sentence.

Prisoners are transferred from the DRU to the Drug Support Unit (DSU). The DSU is a 50 bed unit which takes prisoners from the DRU and from the general prison. It aims to be a drug free area and takes prisoners at the end of their sentences to prepare them for release. They organise groups which again work on the prisoners' addiction problems. The groups in the DSU are not full time. Prisoners in the DSU take part in other prison activities such as work placements.

Workers from the Drug Rehabilitation Unit currently see prisoners referred to them and all those who have failed a mandatory drug test. At this interview they discuss referral to other agencies including "Open Doors".

Information from community agencies

Interviews were completed with a sample of community agencies in contact with "Open Doors". In common with the prison staff interviewed agency staff were asked about their experience of the programme and for comments on its positive and negative aspects.

Due to the participants of the "Open Doors" programme coming from a wide geographical area contacts with an individual agency may be infrequent or when a prisoner is referred it may be the first time that the agency has heard of "Open Doors".

Staff from four Glasgow wide agencies were interviewed and interviews were held with 2 agencies that work with drug users. These were chosen because participants from "Open Doors" had been referred to them. Two of the agencies specifically work with people in contact with criminal justice services.

Follow up data was collected on the participants to analyse community contacts. This was gathered at follow up interview with the participants and confirmed with the "Open Doors" workers.

The agencies interviewed included:

- The Access Project. Like the "Open Doors" programme, Access is funded via a Mental Illness Specific Grant. It is a city wide project run by workers with experience in the field of mental health. They aim to help people with mental health problems who have been involved with criminal justice agencies.
- The Wayside Club. This is a drop in centre for people in Glasgow who are homeless or living in hostels. The centre offers various activities as well as a cafeteria. Staff are available to give advice on problems such as accommodation, benefits, addictions and mental health. It is open Monday to Friday during the day and in the evening. The other role of the Wayside is diversion from custody. They visit the sheriff courts daily to make contact with homeless people who have been arrested. They offer them use of services and try to aid in finding an alternative to prison. They visit known clients in HMP Barlinnie.
- The Simon Community. This is a charity that provides support on the streets, accommodation and resettlement services to single homeless people in Glasgow. The area that they have had contact with the "Open Doors" programme is regarding accommodation services. There are four accommodation projects. The accommodation is provided with 24 hour staffing. The average stay in this supported environment is between 6 – 9 months. The resettlement team help find suitable accommodation and provide support after the move.

Interagency Working

There is a potential forum for effective interagency working in the mental health field. These multidisciplinary meetings are held in the Health Care Centre each week on Wednesday afternoon.

Staffing: Medical officer

Forensic psychiatrists - a consultant and specialist registrar

Mental Health Team Nurse

"Open Doors" staff

During the study period the only regular attenders were the psychiatrists.

The main function of this meeting has been feedback on prisoners that have been referred to the psychiatrists. It has not been a forum to discuss "Open Doors" cases. There are plans to change the format of this meeting.

In the past there was a weekly multidisciplinary meeting which included the visiting psychiatrists, healthcare centre staff, social workers, prison officers and governors.

"Act and Care"

The suicide strategy "Act and Care" states that any member of staff can raise an 'Act' form on a prisoner identifying them at risk of self-harm. An 'Act' form is the standardised form used in the prison for prisoners identified as at risk. It contains a flow chart demonstrating the process to follow, and contains areas for the writing of notes and care plans. It is aimed at reducing the incidence of suicide in prisons. The raising of an

'Act' form is followed by a case conference immediately or if not possible within 24 hours. The case conference should be attended by the appropriate members of staff. The case conference identifies the level of risk and produces a care plan. A further case conference is held in 72 hours and as often as necessary thereafter. In practice the case conference always involves the hall supervisor, an officer and a member of nursing staff.

"Open Doors" staff and other staff groups are rarely informed of these case conferences even when they involve prisoners that they know well.

RESULTS

Information from Prison Based Staff

All staff groups said they did refer prisoners to the programme. However, they could not say how often but it was less than once a month for all those interviewed. Many of those interviewed said they were unsure who to refer. The consensus was that they would refer people who needed 'support.'

When asked to whom they would refer people with obvious mental health problems such as depression or anxiety all staff said they would refer them to the mental health team in the health centre or to the hall doctor. No one stated that they would refer to "Open Doors" as a first step. They might refer to "Open Doors" if they felt that their referral to the health centre had not been appropriately dealt with.

Health centre staff said they would not refer acutely unwell prisoners but they might refer people who needed longer term support. They felt that the lack of training of "Open Doors" staff made it difficult to refer prisoners with major mental illness to them. Psychiatric staff (psychiatrist and community forensic psychiatric nurse) said they would refer people with major mental health problems

The majority of officers thought that "Open Doors" involved only group work. They knew of the individual workers but were unaware they worked for the same programme. They had assumed that they were social workers. This was similar for other agencies.

Most people were unsure what the groups consisted of or who they catered for. Those who knew something about the groups were often critical. A sample of comments includes:

People return to groups as soon as they are rearrested – there does not appear to be any new assessment.

Prisoners become dependent on the groups.

Group participants were given special privileges –such as being allowed to use the telephone while at groups (this was stopped in July 1998).

There is no obvious function to the groups – prisoners just sitting around having tea and coffee and a chat.

It's like a drop in centre.

One prisoner often dominates the whole group.

Some staff thought that groups might be harmful to some individuals due to the mixture of problems group members have. Many commented on the lack of structure and the absence of selection criteria. There was a suggestion that people were taken on because they were liked by the staff rather than for any therapeutic benefit the individual might obtain.

"Open Doors" staff were aware that some of the prisoners they had contact with were very unpopular with both prison and healthcare staff. This was the case one individual who deliberately harmed himself on numerous occasions. He was therefore a difficult management problem. Attending groups was seen as rewarding his self harming behaviour.

One of the objectives of the "Open Doors" programme is to develop effective communication within the prison and the community. This is not occurring. The majority of staff felt that more information on the programme would aid referral. All felt that knew very little about the programme and would like to know more.

In a multidisciplinary team sometimes more than one staff member will work with an individual. This enables the patient to benefit from the different skills of the workers. If this is to be effective the workers must communicate and co-ordinate their input. Without this at best there may be duplication of work.

Some staff said that they are able to co-work effectively with "Open Doors". Others stated that they see some of the same prisoners but the only information shared was whatever the prisoner told them. There was no direct communication or joint planning of input. A typical comment was:

I only become aware that an individual is seeing one of "Open Doors" workers if the prisoner tells me.

Communication is obviously two way. "Open Doors" staff complained that there was little information shared between the various agencies in the prison. They were often not informed about decisions made about prisoners they were working with. The 'Act' case conferences were mentioned by various agencies as occurring without consultation with workers involved with the prisoner.

When a referral has been made to "Open Door" all staff groups said they would like information confirming that they had been seen and if they would continue to see them.

They described feedback as being poor. There were no formal mechanisms for communication. This meant that information was only obtained accidentally:

If I bump into the worker I referred them to Or *If I ask them.*

This was a problem for all agencies not just involving "Open Doors". It was difficult to discover who was working with an individual as there were no centralised records and each agency kept their own notes. The multidisciplinary meeting was mentioned as a regular meeting place by health centre staff, psychiatrists and forensic community psychiatric nurse. All acknowledged the problems of attendance. Meetings were held with some agencies about individual cases. Others reported informal contacts.
"Open Doors" not only receives referrals but also refers individuals to appropriate services. Some agencies such as education and psychiatry reported regular referrals. They stated these were appropriate and good information was given about the individual.

Others stated that referrals from "Open Doors" were rare.

Information from Community Agencies

Poor knowledge about the programme was again highlighted. The community agencies were unsure what they did and who they saw. They were aware that the people referred to them by "Open Doors" had had mental health problems. There did not know how the programme was structured for instance that there were individual and group sessions. If they were aware of the groups they did not know how they were structured.

They stated that the programme staff had made good referrals to them although they were not frequent. They have been given good information on referrals and there has been good follow up involvement if necessary.

All the agencies were uncertain who they should refer. There were no formal communication mechanisms. They described receiving inadequate information when they have referred a prisoner unless it was asked for directly.

There were comments such as:

"We don't refer to them as we don't know what they do. If any of our clients are imprisoned and they have mental health problems, we phone up X" - where X is one of the programme staff.

The prison is not on the social work computer network so there is no easy way that outside social workers can discover if a client has been assessed by the prison, and if so who is working with them.

All the agencies talked to said they would like to know more about the programme so that they could refer appropriately.

SECTION 4: "OPEN DOORS" PARTICIPANTS

METHODOLOGY

Prisoners who had been accepted by the "Open Doors" programme were approached at the beginning of their participation in the programme. Involvement in the study was voluntary. Each individual was given a project information sheet which was discussed with them. Written consent was obtained.

The pre intervention questionnaires incorporated:

1. Demographic data – age, nationality, address.
2. Historical information – personal, family, medical, forensic.
3. Mental health screening questionnaires

   General Health Questionnaire (GHQ 30, Goldberg 1978). This is a self-completion questionnaire which is designed to detect psychiatric disorders in community settings. It measures the presence and absence of symptoms over the previous two weeks. It is short and easy to administer. If the prisoner had difficulty reading the interviewer would read out the questions and the four possible answers. The scoring method used in this study was the "GHQ scoring method" in which presence of symptoms scores one and absence scores zero.

   Health of the Nation Outcome Scale (HoNOS, Wing et al 1996). These scales were developed by the Royal College of Psychiatrists in response to *The Health of the Nation* strategy to 'improve significantly the health and social functioning of mentally ill people'. It is a 12 item assessment scale. Eight of the items are clinical: depressed mood; self harm: overactivity, aggressive or disruptive behaviour; problem drinking

or drug taking; cognitive problems; physical illness or disability; hallucinations or delusions; and other mental and behavioural problems not considered in the previous categories. Three are social items relating to problems with relationships, self care and accommodation. One item rates problems with occupation and activities. It was completed by the researcher with the help of "Open Doors" staff involved with the prisoner. It was used to rate the health and functioning of the prisoner over the previous 2 weeks. The social questions were difficult to complete in a prison setting. Some prisoners had few activities whilst others appeared to function better in prison than in the community.

4. Life events in the six months prior to assessment (Holmes and Rahe 1967). This is a scale developed to quantify stressful life events. It is a list containing forty three items which range from death of a partner, to detention in jail or to marriage. Life events are associated with the development of illnesses. This is a research tool that quantifies the stress of these events. Each event that is identified has a numerical score attached to it. The scores are added together to reach the total used in this study.
5. Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders-III-R Non Patient (SCID) with psychotic screen (Spitzer et al 1990). The SCID is an interview schedule which leads to a diagnosis of mental disorders satisfying the classification criteria for the Diagnostic and Statistical Manual of Mental Disorders. The ratings are made for life time prevalence as well as for current status.
6. Structured Clinical Interview for Personality Disorders (SCID II) (Spitzer et al, 1990). The SCID II is used to standardise the diagnosis of personality disorders and

gives a diagnosis that corresponds to that in DSM-III-R. There are 12 possible personality disorders.

7. Intelligence assessment using the Quick Test (Ammons and Ammons, 1962). Two word and picture sets were used for each participant.
8. Programme participation details including referral details, waiting times, frequency of attendance.
9. Details of contact with other staff groups whilst in prison was collected by asking the prisoner who they were seeing and how often and confirming this with the staff named.

Comparison Group

A comparison group was seen using the same interview schedule.

They were matched with "Open Doors" participants for:

1. age
2. crime
3. time into sentence
4. sentence length.

There were 55 participants and 43 controls. This was due to difficulties in finding matched prisoners using the above criteria. The controls were identified by examining the hall door cards which contain date of birth and liberation date. Some of the halls kept other information which could be accessed on a computer spread sheet such as length of sentence. This information was then used to search for potential controls on the prison computer network (SPIN) to collect details of crime, sentence length if not known and

admission date. It was easier to find suitable controls in the remand hall due to the high turnover of prisoners. It was more difficult to find suitable sentenced prisoners, particularly prisoners on long sentences some time into their sentence.

Outcome Measures for "Open Doors" Participants

Outcome was measured in terms of clinical, social and individual satisfaction at the end of participation in the programme or at the end of the study period. The same questionnaires were used as those at the beginning of their involvement so that any change could be noted.

1. Demographics
2. GHQ-30, Life events and HoNOS
3. SCID
4. Participant satisfaction was measured using an adaptation of the Client Satisfaction Questionnaire (CSQ) (Larsen et al 1979). This is an 8 item self completion questionnaire which asks the rater to score each question between 1 and 4.The questions include whether the service provided has met their needs, helped them to deal with their problems more effectively and whether they would go back to the programme if they needed to in the future.
5. Information about level of participation in the programme through their sentence, any problems encountered with the programme and details of follow up arrangements in the community were collected.
6. Information about contact with other staff was collected.

7. Qualitative data was obtained on the participants' opinion of the programme identifying both the best parts of it and areas that could be improved.

Thirty five "Open Doors" participants took part in a second interview. Two prisoners refused a second interview. Five were seen for initial interview near the end of their sentence which was at the time of their referral to "Open Doors" and a second interview was therefore not possible. Three were given days back and released prior to the planned second interview. Three remand prisoners returned to court and were not given the expected custodial sentence. Seven were transferred to other prisons suddenly.

Statistics

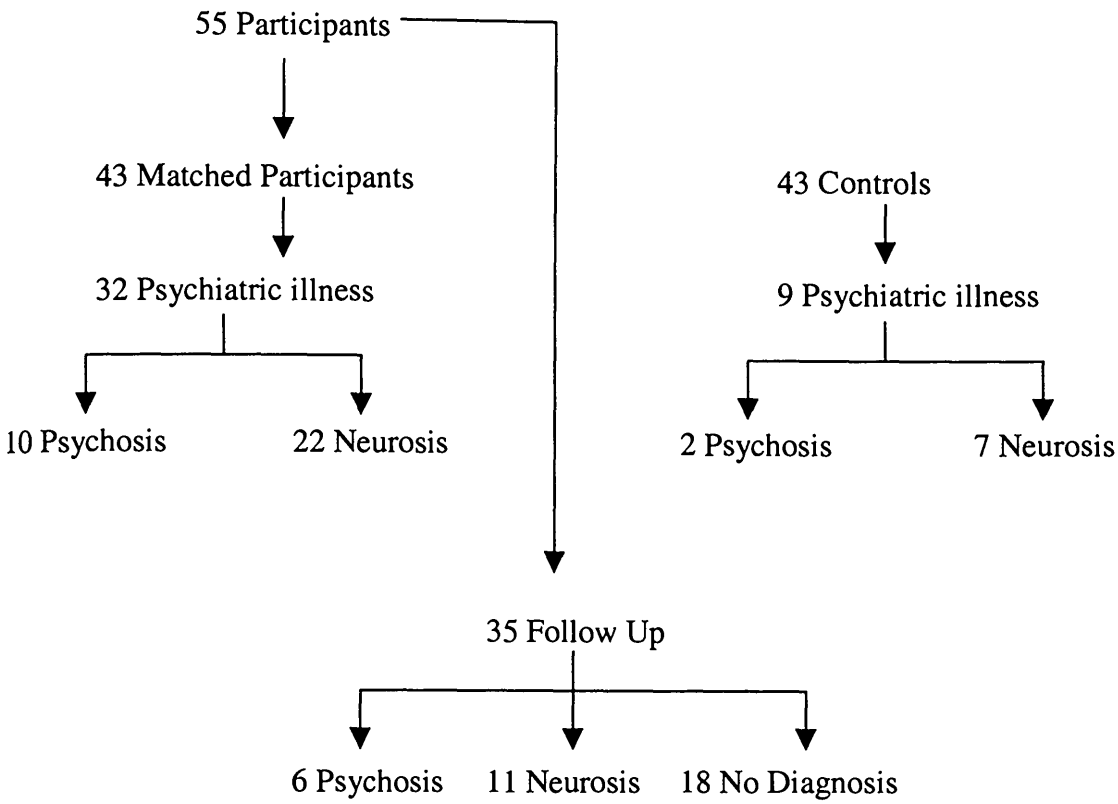
The data are presented in two columns. The first column contains data on the 43 participants for whom a comparison subject was found and the second is the data on the comparison or control group. The data were analysed by comparing the participant group with the controls. If there were any differences between the additional 12 "Open Doors" participants and the 43 matched participants it is noted in the text.

The data were analysed using the statistical package SPSS. Unless otherwise stated the differences between the groups are not statistically significant. Categorical data were analysed using the Chi squared tests, and continuous using t tests. When continuous data was not normally distributed the Mann Whitney U test was used.

Outcome data was analysed using SPSS. The McNemar test was used to assess change in psychiatric diagnosis in the same individual. Other non parametric data were analysed using the Wilcoxon Matched-pairs signed ranks test.

RESULTS

Participants n=55. Matched participants n=43. Comparison group n=43.



Participants had their first research interview on average 3.5 months into their imprisonment (range 0 –18 months). They were seen on average 2 weeks following their initial contact with "Open Doors" (range 1 – 12 weeks).

Demographic Characteristics

Sixty five percent of subjects and 67% of controls were from Glasgow, 22% and 16% from Ayrshire, 8% and 12% from Lanarkshire and 5% of both groups came from other areas.

Fifty eight percent of subjects and 54% of controls were aged between 21 and 30 years, 35% and 37% were between 31 and 40, and 7% and 9% were over 40. The average age of both subjects and controls was 30 years (range 21-45)

Sixty percent of participants and 56% of controls came from single parent families. Almost half of both groups had short periods away from the family home during childhood either in children's homes (2% of participants, 2% of controls), List D schools (37% of participants, 44% of controls) or both (9% of participants, no controls).

Fifty six percent of subjects and 62% of controls had been excluded from school on at least one occasion. Seventy six percent of participants and 67% of controls had no qualifications whereas 22% and 33% respectively had standard grades or their equivalent.

Sixty three per cent of participants were single, 14% were divorced or separated and 4% were widowed. Only 19% were in a current relationship. Forty two percent of the controls were single, 13% were divorced or separated and 44% were in a current relationship. Forty nine percent of participants and 70% of controls had one or more children.

Twenty per cent of participants had never worked. Only 20% described themselves as having a job with specific skills such as motor mechanic or painter and decorator. The

others had worked as labourers or security guards. In the control group 32% had been employed in skilled manual work and 19% had never worked.

Two percent of participants owned their own property, 37% lived in rented accommodation, 28% with their relatives and 33% were homeless. In the control group 23% were homeless, 14% lived with relatives and 63% lived in rented accommodation. No significant differences were found for demographic characteristics between the participant and comparison groups.

Offending History

Thirty five percent of the subject and control groups were remand prisoners.

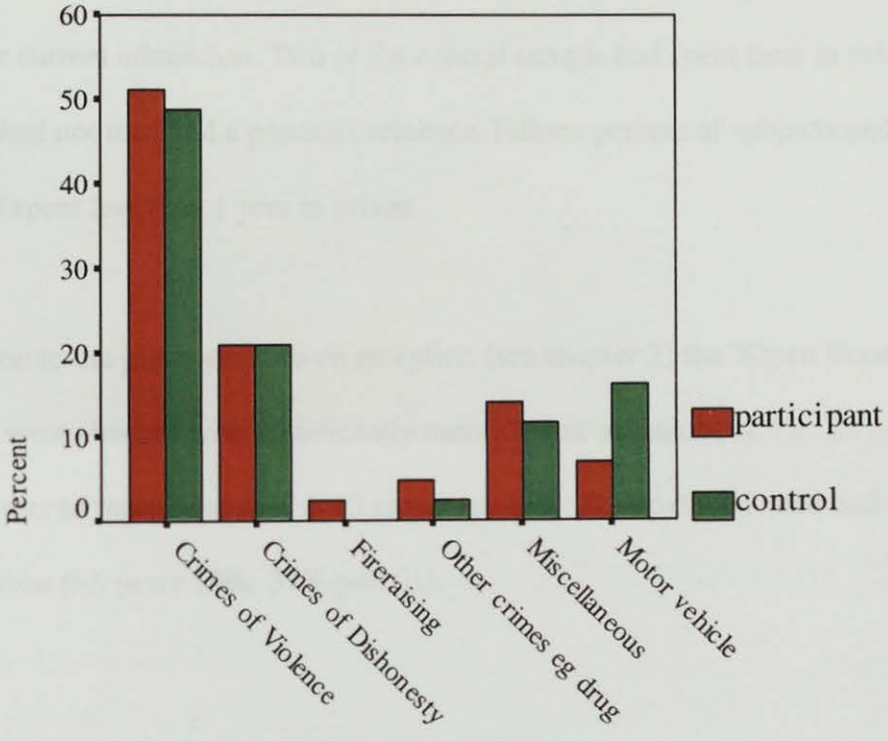


Figure 4.1: Participants and controls current charges/offences

There were no significant differences between the subjects and controls in terms of their offending histories. Given the matching process for subjects and contacts this finding is unsurprising.

Prior to the current (alleged) offence only two of the participants had no previous convictions. Sixty percent had committed crimes of violence. In the control group only one had no previous offences and 56% had a previous conviction for violence.
Forty two percent of participants had over 30 previous convictions and 56% had served more than 10 sentences. Forty two percent of the controls had over 30 convictions and 46% had served more than 10 sentences.

Fifty eight percent of participants and 44% of controls had spent over 5 years in prison prior to their current admission. Two of the control sample had spent time in prison on remand but had not received a previous sentence. Fifteen percent of subjects and 30% of controls had spent less than 1 year in prison.

In comparison to the prisoners seen on reception (see chapter 2) the "Open Doors" participants were charged with significantly more violent offences (61.8%: 28.6%, $p< 0.001$), had served more sentences (>10 sentences 56%: 26% $p<0.001$) and had spent longer in prison (>5 years 58%: 37% $p<0.01$).

Medical History

Forty-five percent of participants had a history of significant health problems. This included: one individual with a history of testicular cancer, one who had a history of hydrocephalus as a child, two with disabilities caused by self harm, two with past pneumothoraxes - one following a stabbing, two with stomach ulcers one of which had perforated, two with asthma, one with eczema, two with previous appendicectomies and three reported fractures following accidents.

A similar (40%) proportion of controls reported health problems. This included: a history of childhood leukemia (2), rheumatic fever (1), osteomyelitis (4), bronchitis (3), appendicitis (1), skull fractures (4), broken jaw (2) nephrectomy (removal of a kidney) and a mild stroke following a stabbing (1).

Thirty two percent of subjects and 22% of controls reported a head injury that had led to hospitalisation.

Sixteen percent of subjects and 5% of controls had a history of an epileptic fit. In addition sixteen percent and 21% respectively had experienced alcohol or drug withdrawal fits.

No significant differences were found between the participant and comparison groups regarding medical history.

Past Psychiatric History

Only 12.7% of participants had no history of previous psychiatric contact. A further 2 (3.6%) prisoners reported having seen a psychiatrist for assessment for a court report only. Thirty one percent had a history of one or more psychiatric admissions and 52% had been seen as outpatients. In the control group 32% had received no previous psychiatric contact, 21% had a court report completed, 16% had treatment as an inpatient and 30% as an outpatient ($p < 0.001$).

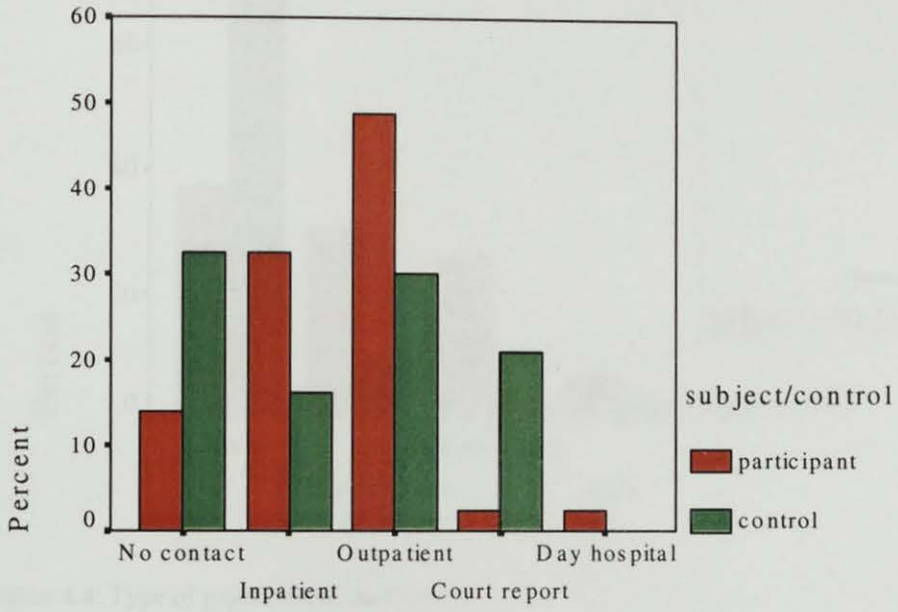


Figure 4.2: Psychiatric contact participants vs controls

Seventy one percent of subjects and 26% of controls had a history of deliberate self harm ($p<0.001$). Ten (18%) of the "Open Doors" participants and one (2.3%) of the control group had inflicted self harm on 10 or more occasions.

	Subjects		Controls	
	N	%	N	%
Self harm	32	74.4	11	25.6
No self harm	11	25.6	32	74.4
Total	43	100	43	100

Figure 4.3: History of self harm p<0.001

Sixty percent of subjects were on psychotropic medication. Twenty nine percent were on antidepressants alone, 22% on an antipsychotic preparation and 9% on both. Only 14% of the control group were taking psychotropic medication, ($p<0.001$).

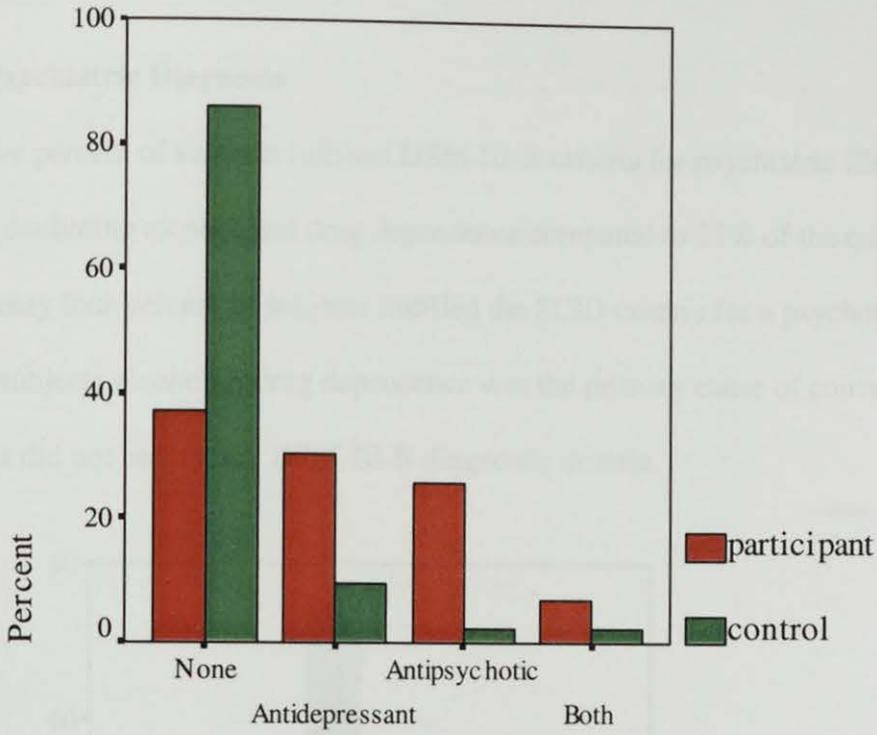


Figure 4.4: Type of psychotropic medication

These findings indicate that problems with mental health had been detected by medical staff either prior to or following imprisonment.

Family Psychiatric History

The family psychiatric history showed a high prevalence of depression in both groups (subjects 31%, controls 21%). There was a family history of schizophrenia in 4 of the subjects and 1 of the controls.

Fifty eight percent of subjects and 56% of controls had a family history of drug and alcohol misuse.

There were no significant differences found between the participant and comparison cohort's family psychiatric history.

Current Psychiatric Diagnosis

Seventy five percent of subjects fulfilled DSM-III-R criteria for psychiatric illness in the last month excluding alcohol and drug dependence compared to 21% of the control group. Twenty four percent of subjects fulfilled the SCID criteria for a psychotic illness. In 23% of subjects alcohol or drug dependence was the primary cause of concern. Only 2 participants did not satisfy any DSM-III-R diagnostic criteria.

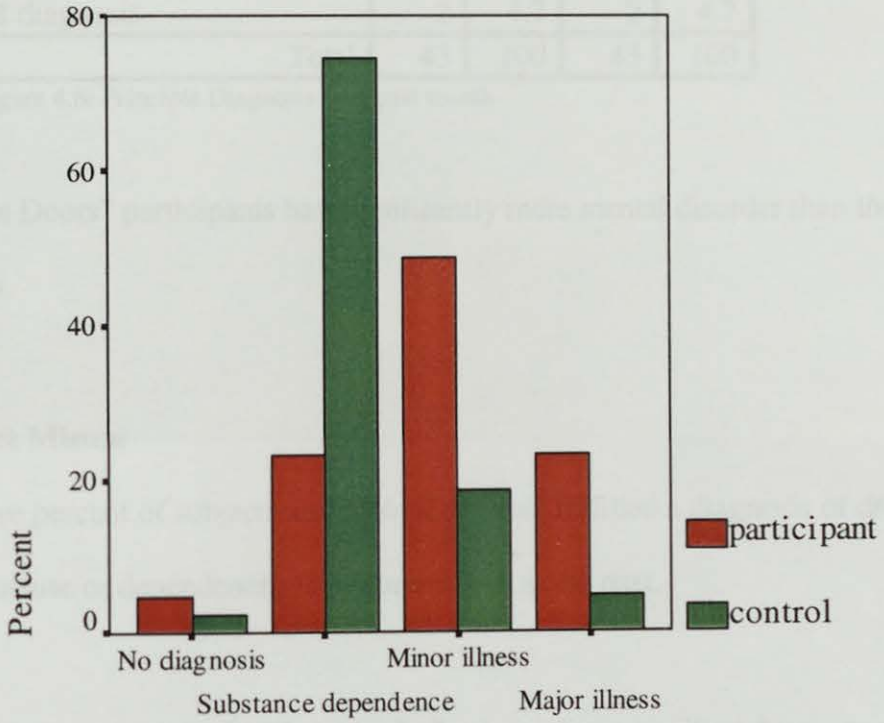


Figure 4.5: Principle diagnostic focus

Major illness is used here to describe a psychotic illness such as schizophrenia, mania or psychotic depression. Minor illness includes non-psychotic depression and anxiety disorders such as panic disorder and phobias. Where individuals fulfilled criteria for more than one disorder, major illnesses were considered the principle focus of concern above minor illnesses which in turn was rated above substance dependence.

Current primary psychiatric diagnosis	Matched subject		Control	
	N	%	n	%
Schizophrenia	7	17.3	2	4.7
Bipolar disorder-manic	1	2.3		
Depression with psychotic features	2	4.7		
Depression	14	32.6	3	7.0
Anxiety Disorders	7	16.2	4	9.3
Post traumatic stress disorder	1	2.3		
Drug dependence	4	9.3	21	48.8
Alcohol dependence	5	11.6	11	25.6
No DSM diagnosis	2	4.7	2	4.7
Total	43	100	43	100

Figure 4.6: Principle Diagnosis over past month

- "Open Doors" participants had significantly more mental disorder than the control group.

Substance Misuse

Eighty five percent of subjects and 93% of controls fulfilled a diagnosis of drug or alcohol misuse or dependence either currently or in the past.

In the subject group 44% fulfilled criteria for dependence on illicit drugs, one (2.3%) for drug misuse, 28% for alcohol dependence, 7% for alcohol misuse and one participant

(2.3%) had misused both. Twenty one percent of subjects were in remission from their drug dependence and twelve percent from alcohol dependence. In the control group 35% fulfilled criteria for dependence on illicit drugs, 7% for misuse of drugs, 28% for alcohol dependence, 2% for alcohol misuse and 21% for both. Fourteen percent of those who had abused both were now in remission from either drug or alcohol dependence and 2% were in remission from both. Seven percent were in remission from their drug dependence. No significant differences were found between participant and control groups for substance misuse.

Sixty five percent of both the subject and control group admitted to using drugs intravenously.

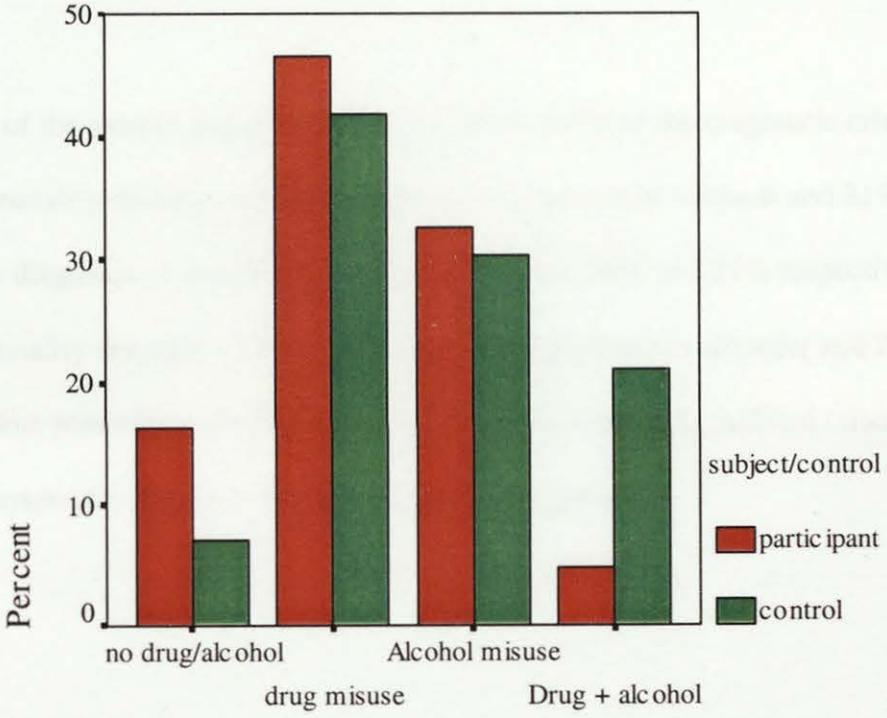


Figure 4.7: Drug/alcohol misuse.

Personality Disorders

Personality disorders are defined by behaviour or traits that are characteristic of the person's recent and long term functioning (since adolescence or early adulthood). These traits cause significant distress to the individual or impairment in social or occupational functioning.

Antisocial personality disorder is defined by a pervasive disregard for and violation of the rights of others as shown by: failure to conform to social norms of lawful behaviour by repeatedly performing acts that are grounds for arrest; deceitfulness; impulsivity; irritability and aggressiveness; reckless disregard for the safety of self or others; failure to sustain consistent work behaviour or honour financial obligations; failure to sustain relationships; and lack of remorse.

Forty percent of the sample group and 14% of controls fulfilled the diagnostic criteria for 3 or more personality disorders ($p<0.001$). Eighty two percent of subjects and 81% of controls had a diagnosis of antisocial personality disorder, 36% and 21% respectively of avoidant personality disorder, 27% and 5% of paranoid personality disorder and 27% and 7% of borderline personality disorder. Eighteen per cent of subjects fulfilled criteria for schizotypal personality disorder and 16% for passive aggressive.

General Health Questionnaire

Over 80% of subjects scored more than 5 on the General Health Questionnaire. This is an indication of caseness (psychiatric morbidity). Sixty percent scored 16 or more. In the control group 46.5% scored over 5.

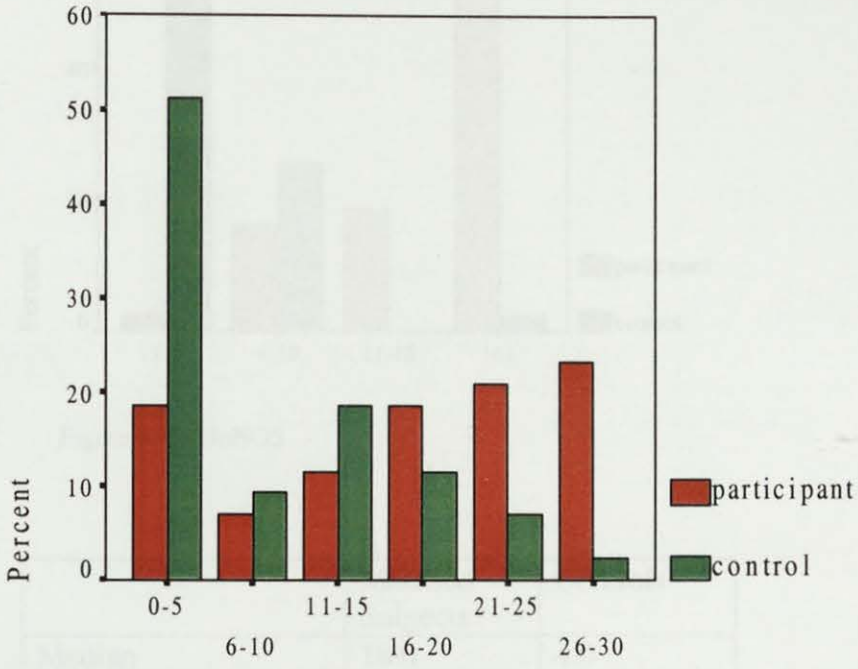


Figure 4.8: GHQ scores

	Matched subjects	Controls
Median	19.0	8.0
Range	0 - 29	0 – 26
N	43	43

Figure 4.9: General Health Questionnaire data Mann Whitney U $P < 0.001$

Life Events

The life events scores were similar for both groups. There was a wide range.

	Matched subjects	Controls
Median	140	180
Range	63 - 457	63 – 567
N	43	43

Figure 4.10: Life events score

Health of the Nation Outcome Scores (HoNOS)

The HoNOS score of the participants was significantly higher than the controls.

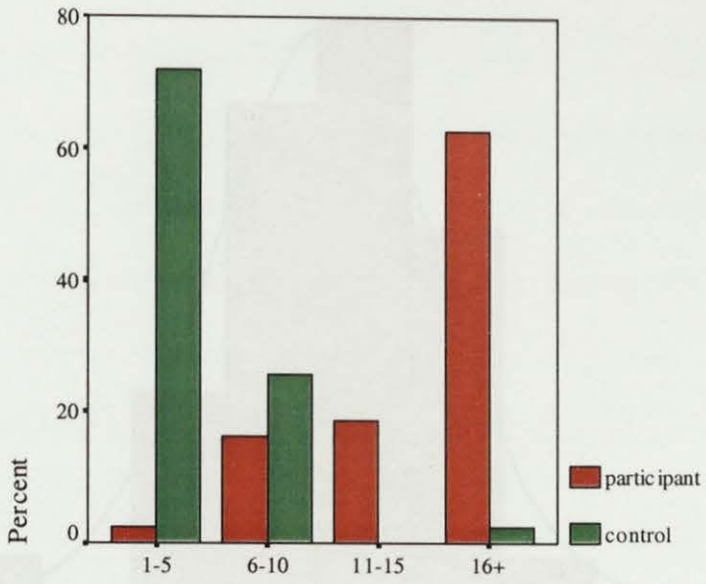


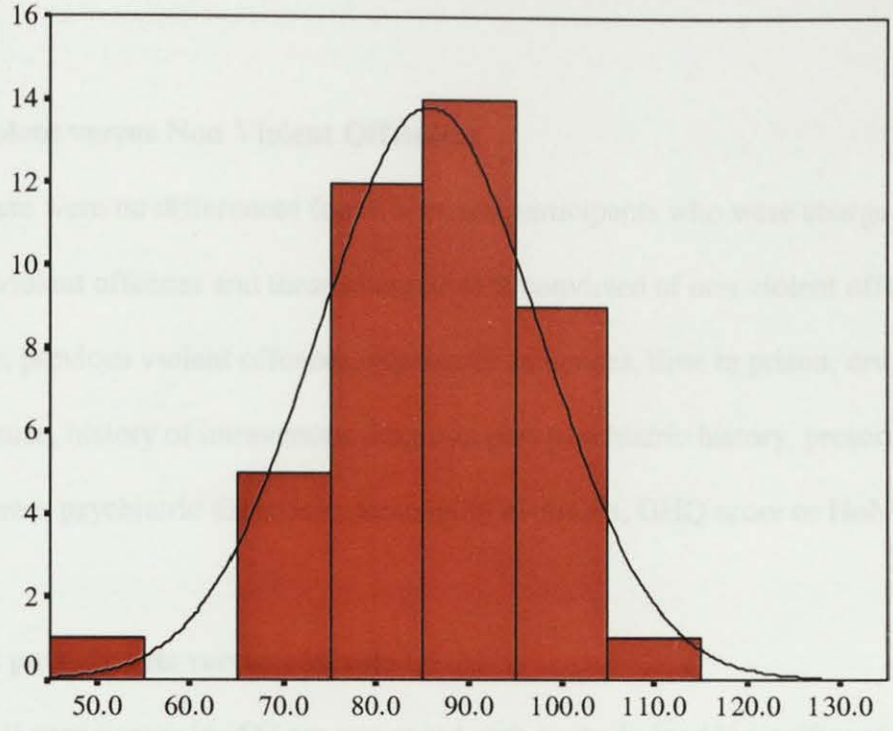
Figure 4.11: HoNOS

	Matched Subjects	Controls
Median	18.0	4.0
Range	6 – 31	0 – 18
N	43	43

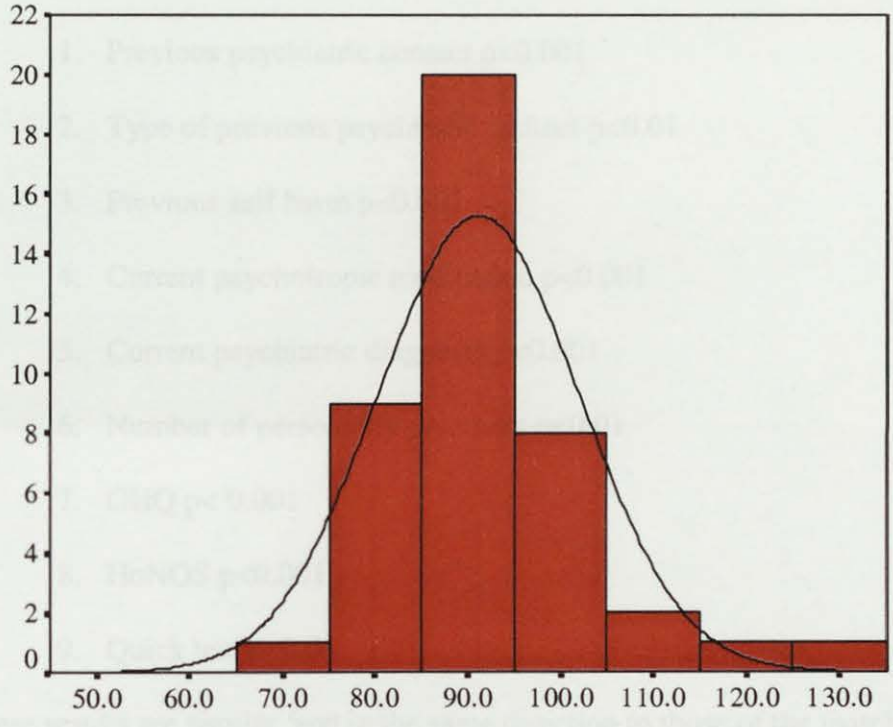
Figure 4.12: HoNOS Data Mann Whitney U test $p < 0.001$

Intelligence

Eight percent of subjects and 2% of controls scored 70 or below using the Quick test placing them in the mild learning disability range. The subject group was significantly lower in intelligence than the control group (t test $p < 0.05$).



SUBJECTS



CONTROLS

Figure 4.13: IQ scores of subjects and controls with distribution curve

Various sub-groups of participants and controls were studied:

Violent versus Non Violent Offenders

There were no differences found between participants who were charged with/convicted of violent offences and those charged with/convicted of non violent offences in terms of age, previous violent offences, number of sentences, time in prison, drug or alcohol misuse, history of intravenous drug use, past psychiatric history, prescribed medication, current psychiatric diagnosis, personality disorders, GHQ score or HoNOS score.

All participants versus controls

If all participants (n=55) are compared with controls (n=43) significant differences between the two groups were found in terms of:

1. Previous psychiatric contact $p<0.001$
2. Type of previous psychiatric contact $p<0.01$
3. Previous self harm $p<0.001$
4. Current psychotropic medication $p<0.001$
5. Current psychiatric diagnosis $p<0.001$
6. Number of personality disorders $p<0.01$
7. GHQ $p< 0.001$
8. HoNOS $p<0.001$
9. Quick test $p<0.05$.

These results are similar and in the same direction to those of the matched participants and control groups.

Matched participants (43) versus unmatched participants (12)

The only significant differences between the matched and unmatched participants is that the 12 unmatched participants were less likely to be single ($p<0.05$) and their HoNOS score was lower (matched participants median = 18, unmatched median = 14.5 $p<0.05$).

Participants - Remand versus Sentenced Prisoners

Significantly more sentenced participants were homeless and more of the remand prisoners lived with their families ($p< 0.05$). There was greater substance misuse in the convicted prisoners ($p<0.05$). There were no significant differences between these two groups in terms of their mental health.

Controls - Remand versus Sentenced Prisoners

In the control group there were 16 remand and 27 convicted prisoners. There were 2 significant differences between these groups. More of the sentenced prisoners had been prescribed psychotropic medication ($p< 0.05$).

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OUTCOME INFORMATION

Comparison of initial data from participants with two interviews and those with an initial interview only, found no significant differences between the two groups in terms of demographic information or mental health problems.

Current Psychiatric Diagnosis

At follow up interview the subjects had the diagnoses listed in Figure 6.1.

The 5 individuals with a diagnosis of schizophrenia still fulfilled the criteria. The individual with a manic illness had improved but remained elated. Six out of 14 individuals were still depressed at follow up. Four out of eight continued to have anxiety disorders. One continued to suffer from post traumatic stress disorder. Two continued to abuse drugs whilst in prison. The individuals whose original diagnosis was alcohol abuse/dependence were unable to obtain alcohol in the prison.

Current Principle Diagnosis	Original diagnosis		Follow up diagnosis	
	N	%	N	%
Schizophrenia	5	14.3	5	14.3
Bipolar disorder – mania	1	2.9	1	2.9
Depression + psychosis	1	2.9		
Depression	13	37.1	6	17.1
Anxiety disorders	8	20.1	4	11.5
PTSD	1	2.9	1	2.9
Drug dependence (abuse at follow up)	3	8.6	2	5.7
Alcohol abuse/dependence	2	5.7		
No diagnosis	1	2.9	16	45.7
Total	35	100	35	100

Figure 4.14: Principle Diagnosis Original vs Follow up

This was analysed by comparing the two groups using the McNemar test with two variables the presence and absence of psychiatric illness excluding substance abuse for the original and follow up diagnosis ($p<0.001$).

General Health Questionnaire

Follow up GHQ scores had improved. Fifty one percent scored 5 or under and 25.7% scored 16 or over.

The Wilcoxon Signed Rank test was used on GHQ numerical scores I (the score at the initial interview) and II (score at follow up interview) ($p<0.001$).

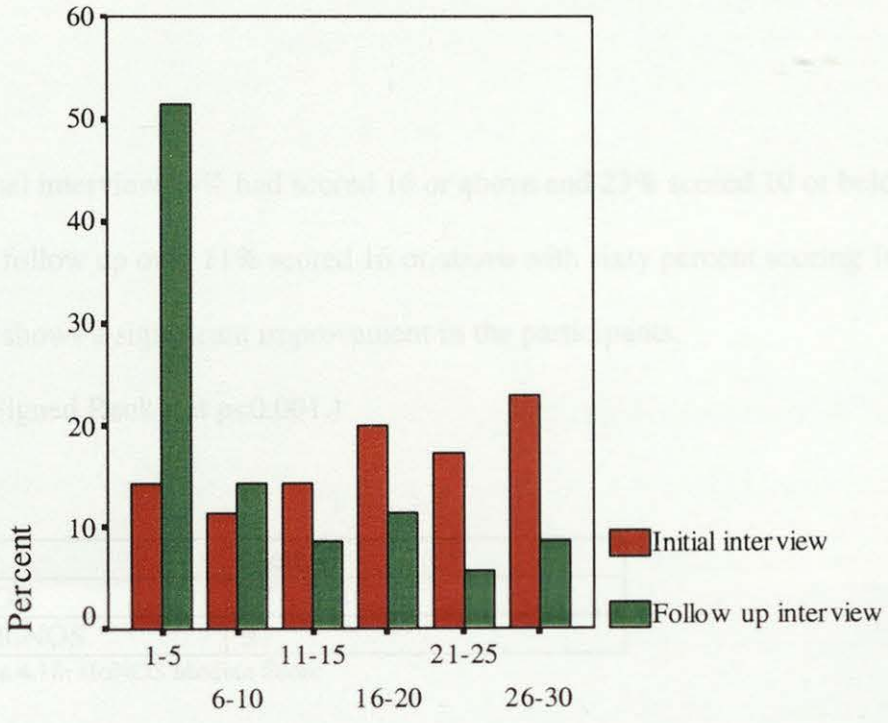

Figure 4.15: Initial and follow up GHQ score

	Median
Initial GHQ Score	19
Follow up GHQ Score	5

Figure 4.16: Median GHQ score Initial vs Follow up

Life events

	Mean	Range(min-max)
Life events 1	199	394 (63-457)
Life events 2	168.5	333(63-396)

Figure 4.17: Life events Initial vs Follow up Wilcoxon Signed Rank test $p<0.05$

The participants who had been in prison for longer periods tended to score less on the life event questionnaire. This was because little had changed for them in the past 6 months.

HoNOS

At the original interview 56% had scored 16 or above and 23% scored 10 or below on the HoNOS. At follow up only 11% scored 16 or above with sixty percent scoring 10 or below. This shows a significant improvement in the participants.

(Wilcoxon Signed Rank test $p<0.001$.)

	Median
Initial HoNOS	17
Follow up HoNOS	9

Figure 4.18: HoNOS Median Score

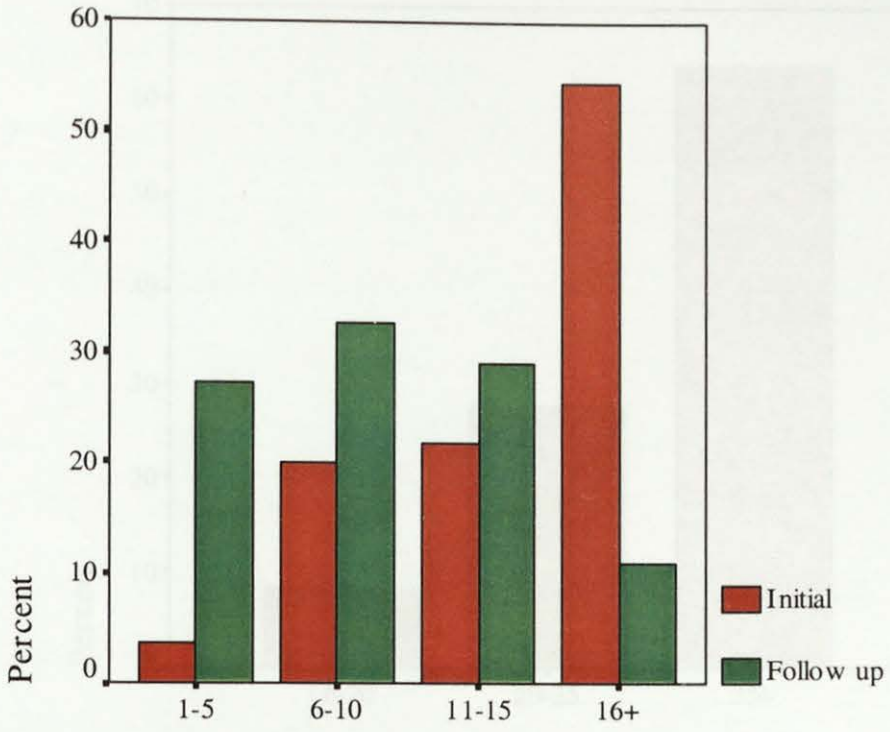

Figure 4.19: HoNOS scores Initial vs Follow up

Participant Satisfaction

Thirty six participants completed the satisfaction questionnaire. Two individuals did not complete it because they had taken part in only one or two sessions and were not in a position to make valid judgements. Three individuals who were seen only for initial interview because they were near the end of their sentences did complete it. Participant satisfaction scores were high with 60% of those interviewed scoring over 25 out of a possible 32 points. Only 4 (11%) scored 20 or less.

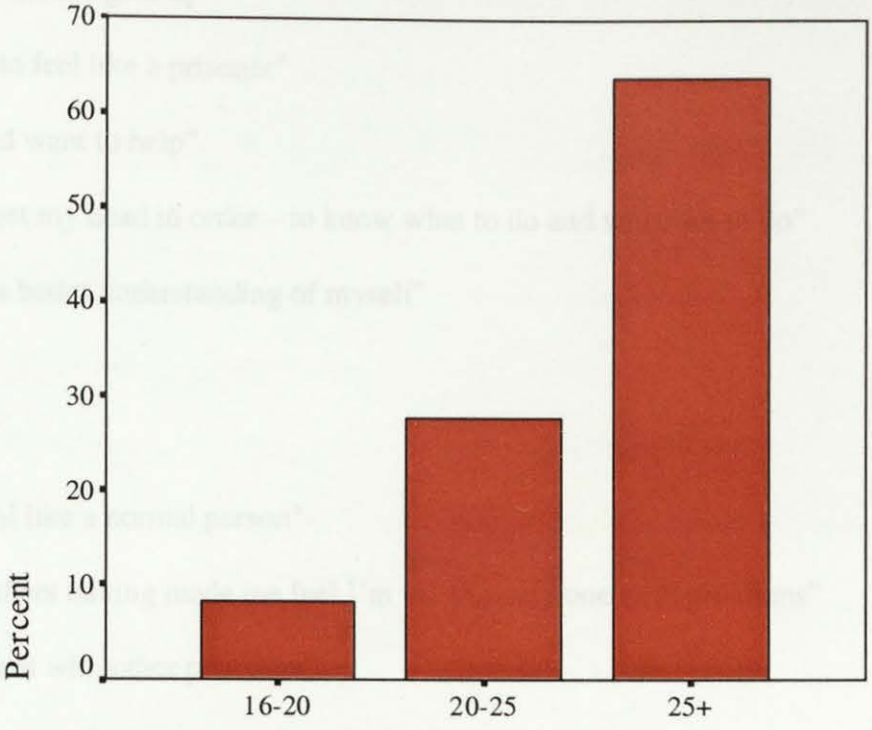

Figure 4.20: Participant satisfaction scores

Comments from participants

Participants were asked for their opinion of the programme in addition to completing the satisfaction questionnaire. They were asked to give both positive and negative comments and to suggest ways in which they felt the programme could be improved.

The majority of the responses were positive as with the satisfaction questionnaire. Almost all prisoners felt that there should be a similar programme in all prisons.

Individual work

"It has saved my life"

"It has made me able to cope with jail"

"They wouldn't let me give up"

"I'm not made to feel like a prisoner"

"They listen and want to help"

"It has helped get my head in order – to know what to do and what not to do"

"It's given me a better understanding of myself"

Group work

"It made me feel like a normal person"

"Listening to others talking made me feel I'm not the only one with problems"

"Felt able to share with other prisoners"

"Getting out of my cell and sitting talking helped my anxiety"

"The groups have a good relaxed atmosphere"

"Enjoy drawing in the art group – it helps me relax so I can talk"

"I feel able to talk about what's bothering me"

Suggested Improvements

The participants were asked if they could suggest any improvements to the individual and group sessions.

Individual work

"Didn't see often enough"

"Interview rooms on hall noisy – no privacy so felt couldn't talk sometimes"

"Would have liked sessions of set time and length – sometimes felt guilty at taking up time when I knew they had lots of other people to see"

Group work

"It would be good to have more groups – maybe 3 times a week"

"Don't like having an officer there"

"Would like to have more discussion groups – something to make me think"

"Sometimes feels that groups don't apply to me and then at others felt could identify with other people"

"Groups continually cancelled as no officers - Look forward to them and then disappointed"

"Would like to have other staff at the groups - there used to be other people who came now there's nobody"

Throughcare Information

Twenty two out of the fifty five participants were still in prison at the end of the survey period or had been transferred to other prisons to complete their sentences.

Six of the prisoners were on Supervised Release Orders. This is an order placed by the court at the time of sentencing. It makes supervision of the individual by a social worker mandatory on release. This is to protect the public from serious harm. It requires the

offender to report to a supervising officer at intervals specified by the officer and to notify any change of address. If the attender fails to comply with the order he can be returned to prison. During their imprisonment the prison social workers have regular contact with the offenders and if they are willing to do so agree a plan of work. This focuses on examining the prisoner's offending behaviour and social needs, and is geared towards reducing the risk of future offending. Contact can be made with the supervising officer at any time during the sentence. A pre-release meeting is held one month prior to liberation and involves the prisoner, his supervising officer and the prison social worker. The purpose of the meeting is to finalise the release plan.

Figure 4.21 lists the arrangements made for those prisoners who were released into the community. The prisoners on Supervised Release Orders are not listed. The total number of contacts made is higher than the number of prisoners involved because some had contacts initiated with more than one agency. Only two of those released refused to have any follow up arrangements made. They were informed that social work departments could provide them with assistance and advised to contact the appropriate local department if this became necessary. Two of the prisoners were followed up for several months after release by an 'Open Doors" worker. This arrangement allowed community services to allocate workers and assisted with coordination of care.

Two prisoners committed suicide following release. One of these had a diagnosis of a severe borderline personality disorder. He had support from a number of agencies including social work and psychiatry. He killed himself the day his supervised release

order finished. He had been informed that contact would be maintained beyond the compulsory period if he wished.

The other had a diagnosis of schizophrenia complicated by drug misuse. He had refused any follow up arrangements except contact with his GP. He was due to return to court on a similar charge as that which had led to his original imprisonment.

5	Social work contacts initiated or restarted prior to release
2	Supported accommodation with Simon Community
3	Accommodation arranged prior to release
3	Referred to Glasgow Association for Mental Health
2	Drug agencies contacted
2	Alcohol agencies contacted
6	Appointments made with local psychiatric services –one new contact, others previously known
2	Appointments with General Practitioner
6	Facilitated ongoing contact with community workers
4	Arrangements made for release by other agencies
2	Refused follow up but made aware of voluntary aftercare offered by social work.
2	Active follow up by "Open Doors" worker while community agencies allocated workers

Table 4.21: Details of follow up arrangements

DISCUSSION

Methodology

Receptions Survey:

The information collected on illicit drug misuse was incomplete. It did not differentiate between those who had used illicit drugs on an occasional basis and those who were dependent on illicit drugs. It also gave no time scale to their use of illicit drugs, only giving a lifetime use. The CAGE questionnaire again did not differentiate between alcohol abuse and dependence. The CIS-R measured the presence of symptoms in the last month. It did not give lifetime diagnoses.

Survey of "Open Doors" participants

The pack of questionnaires used to survey the mental health of the "Open Doors" participants and the controls was extensive taking around three hours to administer. The questionnaires used were not designed for use in a prison population. This was a particular problem with the HoNOS. The HoNOS was filled in by the researcher and "Open Doors" staff for participants and by the researcher alone for controls. This may have caused a bias between the two groups. It was also a difficult measure to use on prisoners. Some prisoners functioned better in the controlled conditions of the prison than they did in the community. This led to low scores which were not consistent with their level of dysfunction.

The SCID and SCID II gave current and lifetime diagnoses of psychiatric illnesses including alcohol and drug use and personality disorder. However, there was no formal assessment of need for treatment or transfer to hospital.

Follow up data may have been influenced by the different stressors prisoners were under. Some were about to be transferred to new prisons. Others were being discharged into the community to housing projects. No second interviews were carried out on the control group in order to give a comparison. However, it should be noted that there was a low incidence of mental disorder in the control group.

Statistical Analysis

Statistical analysis enabled differences between the groups to be highlighted. The main problems with the statistical tests used were the small numbers involved in both the admissions survey and the "Open Doors" programme. This was addressed in part for the Chi squared tests by amalgamating cells to give higher numbers. With the small numbers it was difficult to show statistical significance especially where the differences were subtle. On the other hand statistical significance may have been found which would not have been present if there had been larger samples. For the survey of admissions it was useful having other larger prison surveys to compare results with. Hopefully this would have highlighted any rogue results. There were no comparative surveys to those of the "Open Doors" participants and even smaller numbers.

Results

Admissions Survey

HMP, Barlinnie admits a large number of prisoners every week. During the week that this survey was carried out 323 prisoners were admitted. If HMP, Barlinnie admits 25,000 prisoners per year, this is less than the expected average weekly intake of 480. Of those admitted during the survey week 187 were transferred the next day to other prisons. One hundred and nineteen prisoners were interviewed. Thirteen refused to be interviewed and 4 were released on the day following admission.

The majority of those interviewed (66%) came from Glasgow and were aged under 30. They had poor educational attainment and few work qualifications. Two thirds were not in a relationship but over 60% had children. Eleven percent were homeless or living in hostels prior to coming to prison. Eighty-four percent had committed previous offences and eighty-one percent had spent time in prison before. Thirty-seven percent had spent over 5 years in prison. On this occasion 29% were charged with/convicted of charges of dishonesty and 24% crimes of violence.

Thirty-two percent had received inpatient or outpatient psychiatric assessment and/or treatment and 16% had deliberately harmed themselves in the past. Nearly a quarter of the prisoners had a family history of psychiatric problems, the majority of these were drug or alcohol related.

This research study found that there were a high number of mentally disordered prisoners coming into HMP, Barlinnie confirming the hypothesis that there are significant levels of psychiatric morbidity in the prison. Overall there was a 5% prevalence of psychosis (remand 6.3%/convicted 3.6%) and a 30% prevalence of minor psychological disorders (remand 36.7%/convicted 21.4%). If this is a representative sample and it is assumed the population of HMP, Barlinnie is 1000, made up of one third remand and two thirds convicted prisoners, there may be 21 remand and 24 convicted prisoners who have a psychotic illness, and 122 remand and 143 convicted prisoners with minor psychological problems such as depression. These findings are in line with other prison surveys. Davidson et al (1995) found a 2.3% incidence of major psychiatric disorder and a 25% incidence of minor psychiatric disorders amongst the Scottish remand population. Singleton et al (1998) using the same measures as those in this study found a prevalence of psychosis of 10% in remand and 7% in sentenced prisoners and for minor psychiatric disorders of 59% and 40% in England and Wales.

There was a higher incidence of psychological morbidity amongst remand prisoners. Fifty two percent of remand prisoners and 29% of convicted prisoners scored above the threshold for significant psychiatric morbidity on the CIS-R. Forty three percent of the remand prisoners and 25% of the convicted fulfilled ICD 10 criteria for psychiatric illness. Higher psychiatric morbidity in remand samples has been found in other prison surveys (Singleton 1998, Gunn 1991). Remand prisoners have been identified as a priority group by the Scottish Prison service.

Drug and alcohol misuse is a major problem. In the survey, 79% of prisoners admitted using illicit drugs, 42% had injected drugs and 15% had abused or been dependent on alcohol. This result is similar to Davidson et al (1995) who found that 73% of the remand population had used drugs. Singleton (1998) found that 51% of remand and 43% of sentenced prisoners had been dependent on illicit drugs in the year prior to imprisonment. They also found that 58% of remand and 63% of sentenced prisoners had been abusing alcohol in the year prior to imprisonment. This is higher than that found in this survey. This may be due to the measures used. Singleton (1998) used a more detailed assessment which may provide a more accurate picture of alcohol abuse. Twenty five percent of those interviewed had both a mental illness and had abused drugs or alcohol.

There is evidence of significant under reporting of psychiatric and substance misuse problems by prisoners during the reception process. In the review of health services in HMP, Barlinnie conducted by Greater Glasgow Health Board (Morrison, 1998) it was found that the admission notes recorded that 38.7% of prisoners had used or were currently using illegal drugs and 23.1% admitted using illegal drugs in the four weeks prior to admission. This is supported by those prisoners interviewed in the survey, of whom 23% had been prescribed medication to manage their withdrawal from alcohol or drugs. From the notes 22% had a history of injecting drugs and nine percent had a current or past history of alcohol problems. Eleven percent had a history of mental illness noted and 11% had reported one or more incident of self harm. If this is compared with this survey's findings where 79% had used drugs, 42% admitted injecting drugs, 32% had had previous psychiatric contact and 16% reported a history of self harm, it suggests that

there is significant under reporting of past psychiatric histories and drug or alcohol problems. This failure of detection and disclosure of mental health problems makes it difficult to target care at the right individuals.

Nineteen (16%) of those interviewed had been seen by agencies within the prison when follow up information was collected. Eleven (9%) of these were seen by the education department. One had been accepted onto the cognitive skills course. Seven were seen by mental health services. None of those with a psychosis saw a psychiatrist. It must be noted that many of those interviewed may have remained in the prison for a short time. In this case it would be unlikely that any service would identify them. Twelve of the convicted prisoners were serving a sentence of less than a week, nine less than one month, 19 less than 6 months, and 6 more than 6 months. Nineteen of the remand prisoners were due to return back to court in one week or less. Even with the short length of stay taken into account, the discrepancy between need identified during the survey and services utilised suggests that much need remains unidentified and unmet.

"Open Doors" Programme

The main aim of the programme is the promotion of positive mental health in the prison. This is a broad aim in the context of the high levels of mental disorder within the prison population. Two full time and one part time staff working alone can have little impact on the wider population.

The programme's objectives were examined.

Objective one: To assess all referrals and to determine the appropriate intervention. This appeared to be carried out although the quality of case note recording, inconsistent use of referral forms and lack of a formal assessment process determining the final intervention made this impossible to quantify.

Objective two: To assist individuals in understanding their mental health problems. This was addressed by staff during group and individual sessions. Limited notes on the content of individual sessions and the absence of notes for group work made this difficult to evaluate although the group sessions did make use of some educational materials on mental disorders.

Objective three: To raise self esteem and improve coping skills. The participants mental health and social functioning improved during participation in the "Open Doors" programme (chapter 6). Many participants commented that they wouldn't have coped with their imprisonment without the "Open Doors" workers. From the measures used it can be suggested that this objective was achieved by the "Open Doors" programme.

Objective Four: To address offending behaviour and recidivism. There was no evidence that offending behaviour was directly addressed by the "Open Doors" programme. There is evidence from the literature to suggest that treatment of mental disorders may diminish recidivism. A longer term follow up of the "Open Doors" participants and controls would reveal recidivism rates.

Objective five: To offer throughcare and community care packages to participants. All participants who were interviewed prior to discharge had been offered community support. No use had been made of the Care Programme Approach. Its use should be considered for all "Open Doors" participants and other mentally disordered offenders released from prison.

Objective six: To develop effective communication within the prison and the community. This was not being achieved.

The aims and objectives of the programme were to be fulfilled by a combination of individual and group sessions, and multidisciplinary working. The evaluation identified many problems with the structure and organisation of the "Open Doors" programme which must be addressed to make it more effective.

The 'Open Doors' programme was intended to be multidisciplinary. Currently the three staff are all from a social work background. Staff from other disciplines within the prison have expressed willingness to take part in group work. "Open Doors" staff are covering social work duties. This reduces the amount of time they have to spend working with mentally disordered offenders. It also devalues the programme in that the work carried out by "Open Doors" is not seen to be as essential as other social work duties. Currently

staff are identifying some individuals for "Open Doors" through their social work duties. The survey of receptions to the prison identified that there is a high level of need for services working with mentally disordered offenders. Social work national standards identify the mentally ill as a priority group for provision of services. Open Doors staff who are employed fulltime by the programme should be carrying out "Open Doors" work rather than social work duties.

"Open Doors" staff training has been limited. One member of staff moved directly from social work administration to working on the programme without additional training. There was no structured plan for maintaining and improving staff skills. Evidence from other prison programmes has emphasised the need for appropriately trained staff (McGuire 1995, Hollin 1999). There was regular supervision of the individual staff members. However the supervisor had not had training in group work or specialist psychotherapeutic techniques. This meant that there was no supervision of the groups. The group worker trained in group work when the programme started in 1991 but this had not been updated.

Records and record keeping were poor. This might improve if the administrative post was filled and if "Open Doors" staff worked on their own case load rather than covering for shortages in the social work department. The importance of accurate up to date records needs to be emphasised. They allow other workers to take over a case when appropriate.

If record keeping improved and access was given to the prison computer network and the Glasgow social work network, communication between staff groups would improve. For instance, if a record of individuals being seen by "Open Doors" personnel was accessible to other staff groups, the "Open Doors" personnel could be invited to ACT case conferences. This does not necessarily need to be via the computer networks. A list of active cases could be kept on the halls or in the health care centre without breaching confidentiality. The administration worker would be able to update this weekly. The Glasgow social work network would aid in identification of client contacts both within and outside the prison. It is understood that confidentiality issues would need to be considered prior to giving access to the different networks.

Criticisms of interview facilities have been noted. When interviewing individuals about confidential matters a quiet, undisturbed and safe environment is important. This was not available in the majority of halls. The venue for group work was not ideal particularly for the art group. The groups were frequently interrupted by the telephone and by people entering or leaving the room. This disrupted the flow of the group. This would be easy to avoid but its importance had not been noted.

There were no set referral criteria for the "Open Doors" programme. It is an objective of the programme to assess all inmates referred to them and part of the philosophy to consider mental disorder in its widest possible context. However, this lack of definition and of structure was raised many times by potential referrers. They described it as a barrier to referral.

Analysis of referral details on those seen during the research showed that 40 % of participants were self referrals and that almost half had attended the programme during previous periods of imprisonment. As record keeping was poor it was difficult to know why these individuals had attended the programme and what work had been done with them in the past. Given the level of need found in the survey of receptions, there appears to be a lack of assessment and referral of new cases.

The majority of individual work could be called supportive psychotherapy. This type of therapy is used in the health service for individuals with short-lived intense emotional crises. However, more structured sessions such as cognitive behaviour therapy have been shown to be more effective in the treatment of anxiety disorders such as agoraphobia and post traumatic stress disorder. None of the workers had received training in other therapies. Two thirds of those who were seen for individual work had ten or more sessions. One third were seen twenty or more times. This level of contact provides time in which sessions could be moved from supportive to more therapeutic intervention if staff had the requisite skills.

The lack of outcome measures for the programme meant that objective information about the progress of a participant was not available. The use of outcome measures has been recommended in the literature on the design of an effective programme (McGuire 1995, Hollin 1999).

There were no selection criteria for the groups. This resulted in groups containing prisoners with very different problems. They were unstructured, the content depending on which prisoner wanted to talk. Unstructured groups need to be managed effectively by a group leader. This was not the case in the observed groups during the research period. Evidence from other group programmes suggests that structured programmes are more effective. Research also shows that programme integrity is a vital part of effectiveness. The groups need clear aims, adequate resources and appropriately trained and supported staff. To maintain group effectiveness there must be an agreed plan for monitoring and evaluation. Indiscriminate targeting of treatment programmes has been shown to be counter-productive both for mentally disordered offenders and in reducing recidivism (Eden 1997, Hollin 1999). There is little evidence that unstructured methods of working improve outcomes in mental disorder.

Many groups were cancelled during the evaluation period. This was due to staff holidays and sickness and at times to there being no officers available to attend the groups. It is poor planning that such an important part of the "Open Doors" programme is dependent on one individual. If more structured groups were put in place, staff from other disciplines could contribute. This would broaden the programme and enable it to be more multidisciplinary as was originally intended. The survey of receptions demonstrated high levels of depressive and anxiety disorders. It would be possible to run time limited management groups on a regular basis with selected prisoners.

There have been problems in running groups containing prisoners from different halls since 'Time-tabling' was introduced. It is beneficial for prisoners to be out of their cells working. A therapeutic group for prisoners with mental disorders is also beneficial. It should be possible to release prisoners from their work to attend groups without loss of pay. (This is the case for the 'sex offender unit.') This does not seem to be recognised by the prison service.

The Third Prison Survey noted that prison officers often felt that they would benefit from more training in the management of mentally disordered offenders. The officers who attend the groups had no specific training for their attendance. Prison officers have the most regular contact with prisoners. The majority of the prisoners who were identified as having a mental disorder in the survey of receptions (chapter 2) did not require transfer from prison to hospital but would benefit from monitoring and assistance in prison. Prison officers can play a vital role in the management of mentally disordered prisoners.

Without close links between services working with mentally disordered offenders it is difficult to deliver effective care. These links were not present in HMP, Barlinnie. Both prison and community staff did not have an adequate understanding of the aims and working methods of the "Open Doors" programme. The majority of staff interviewed knew about group work but did not know what this consisted of or complained that they were a time of special privilege for those involved. Many of the negative comments reflect a lack of knowledge about the "Open Doors" programme and its role.

All staff groups complained of poor communication, not only with "Open Doors" staff but also between and within other staff groups. There was little co working. Several different agencies could be involved with one individual without knowing about or discussing other agencies involvement. This can lead to duplication of work. With limited resources coordination of care is vital. Without it the prison's services cannot identify or treat a larger sample of those who might benefit from available care.

The low importance placed on multidisciplinary working could be seen from the poor attendance at the 'multidisciplinary' meeting. This was in part due to its perceived format as a forum for the visiting psychiatrists to report back on assessed individuals. It was not used as a forum to discuss mentally disordered offenders throughout the prison.

There were problems with information sharing with community agencies. This included finding out if people referred to "Open Doors" had been assessed. Referrals made to "Open Doors" agencies were detailed and appropriate. A more defined feedback mechanism would ensure consistency of information. According to the agency involved, feedback will at times be dependent on the assessed individual agreeing to this. Access to the Glasgow social work network would aid this communication for social work agencies such as the Access Project.

"Open Doors" Participants

"Open Doors" is seeing prisoners with significant mental health problems and severe personality disorders. Seventy five percent of participants had a psychiatric diagnosis excluding substance abuse. Over twenty percent had a psychotic illness. Only two fulfilled no DSM-III-R criteria for psychiatric illnesses and they had severe personality disorders. Eighty five percent of participants had abused or were dependent on alcohol or drugs at some time. Sixty five percent had injected drugs. Over eighty percent had a diagnosis of antisocial personality disorder. Forty percent fulfilled the criteria for three or more personality disorders.

Comparison of the subject and control groups demonstrates significant differences on measures of psychiatric morbidity including the use of psychiatric services, incidence of deliberate self harm, the prescription of psychotropic medication, the presence of current mental illness, number of personality disorders, and scores on the General Health Questionnaire and Health of the Nation Outcome Score. This confirms the original hypothesis that "Open Doors" participants had greater levels of mental health problems than controls. Seventy five percent of participants had a diagnosis of a mental illness compared to only twenty one percent of controls. Twenty percent of the participants had a psychotic illness. The participants were aware of their problems and reported more symptoms as shown by the General Health Questionnaire. Measurement of health and social functioning (HoNOS) demonstrated that they had significantly more problems. Intelligence testing showed 8% of subjects scored in the mild learning disability range. The intelligence level of the participants was lower than that of the controls.

There was no significant difference between the participant and comparison groups in terms of alcohol and drug misuse. Eighty five percent of subjects had been dependent on or abused drugs or alcohol either prior to admission or in the past. Sixty five percent of both groups had used illicit drugs intravenously. Psychotic illnesses in combination with drug or alcohol misuse have been found to be significantly associated with violence and arrest (Scott, 1998, Swartz, 1998, Muntaner, 1998). Drug and alcohol misuse is a past or current major issue for the majority of prisoners.

"Open Doors" participants are also manifestly different from the general prison population. A comparison of "Open Doors" participants and prison receptions found that the "Open Doors" participants had a more disrupted childhood being more likely to come from single parent families and to have spent time in List D schools. They had a greater history of violence, more convictions and had spent longer in prison. Eighty four percent of participants had a past psychiatric history compared to 32% of receptions ($p<0.001$). Seventy one percent of the subjects and only 16% of the receptions had a history of deliberate self harm ($p<0.001$). Sixty percent of subjects and 10% of receptions were on psychotropic medication ($p<0.001$). Seventy three percent of "Open Doors" participants and 35% of receptions had a current psychiatric diagnosis excluding drug or alcohol misuse. Open Doors participants were more likely to abuse drugs and/or alcohol than those coming into prison (85% compared to 71.5%). They were also more likely to have used drugs intravenously (65% to 42%). On intelligence testing, 11% of the admissions and 8% of the subjects scored below 70 ($p<0.05$).

If the "Open Doors" participants are compared with the results of the receptions survey they are more likely to be in prison for a violent offence and have spent longer in prison. Over two thirds of the "Open Doors" participants had more than one personality disorder. This indicates that the participants were a very disturbed population in terms of their personalities. In the prison population it is antisocial personality disorder that is of most interest due to its overlap with psychopathic disorder. Psychopathic disorder is defined in the Mental Health Act (1983) (which operates in England and Wales) as a persistent disorder or disability of mind which results in abnormally aggressive or seriously irresponsible conduct on the part of the person concerned. It has been linked to a high incidence of violent crime. The combination of mental illness, antisocial personality disorder and substance misuse have been associated with an increase in the rate of violent offending (Steadman, 1998). There are high levels of co-morbidity on the "Open Doors" participants.

Thirty five out of the original fifty five participants had a follow up interview. When the 35 were compared with the 20 participants not re-interviewed there were no significant differences found between the results of the initial interview. The time scale of the follow up interview varied between 6 weeks and 9 months. Many of the prisoners involved in "Open Doors" were on remand, serving short sentences or awaiting transfer to other prisons. Long term involvement with prisoners may be difficult due to the uncertainties of their length of stay in one prison. The control group was not reinterviewed. They had a low incidence of psychiatric disorder at the original interview and changes were unlikely to be significant.

The third hypothesis was that participation in the "Open Doors" programme improved individuals mental health. Outcome scores as measured by diagnosis, GHQ and HoNOS showed significant improvement in the mental health of prisoners who participated in the programme. This improvement cannot be entirely attributed to "Open Doors" as there were other workers involved in participants' care and 60% were on some form of psychotropic medication. There was a significant reduction in life event scores between first and second interviews. At the original interview participants had undergone a change in factors such as residence, mode of dress, eating habits, working hours, and financial status. These had remained stable whilst they were in prison. To a degree this provides a measure of acclimatisation to prison life. This reduction could be related to a decrease in psychiatric morbidity. There was a significant reduction in the prevalence of current psychiatric illnesses. Forty six percent of the prisoners did not fulfill diagnostic criteria for a current psychiatric illness at follow up compared to only one (2.9%) at the initial interview.

The effect of acclimatisation to prison life or that of being close to release are not directly measured. Both may in part account for some of improvements in mental health seen here. Two of the prisoners who had a second interview were being transferred to other prisons and they showed some, but not marked improvement. Harding and Zimmerman (1989) found that General Health Questionnaire scores in remand prisoners in Switzerland were significantly higher 10 days after imprisonment than at 2 months. They suggested two explanations for this. The first was that symptoms had decreased because of adaptation to detention so that symptoms associated with stress would diminish. The

second is that due to the length of time they had experienced the symptoms they had grown to accept their psychological suffering as 'normal'.

Poporino and Montiuk's study (1995) of the prison careers of mentally disordered offenders in an American jail indicated that mentally disordered offenders fare less well in prison than non disordered offenders. McManus's report (1994) indicates that prison officers are aware that quiet withdrawn mentally ill prisoners may be forgotten about. Therefore identification and participation in the "Open Doors" programme may have meant that the individuals had an advocate who ensured that they were not disadvantaged by their mental illness. The participants may also have improved just by taking part in the programme and not because of any therapeutic techniques. This is known as the 'Hawthorne Effect' (Mayo 1933).

There was high participant satisfaction with the "Open Doors" Programme. The participants reported that the programme had addressed their needs and helped with their problems. Engaging this population in treatment is difficult. Therefore participant satisfaction is important. Without it they are unlikely to engage in treatment and/or follow up. However, it cannot be taken in isolation as validation for the existence of the groups.

Community care arrangements made for "Open Doors" participants were good.
All participants who wanted community contacts made for them had these arranged. This included where possible visits to the prisoner by community workers prior to release. Two participants were followed up for some months by "Open Doors" staff while their

cases were allocated to a worker in the community. Community care arrangements can be a problem for prisoners because of the uncertainty of release dates particularly for remand prisoners and for prisoners with outstanding warrants.

Taking into account the other factors which may have contributed to a prisoner's mental health, participation in the "Open Doors" programme is beneficial. However, there are high levels of psychiatric morbidity amongst prisoners and only a small proportion of these are referred to the "Open Doors" programme. The programme could reach a larger number of prisoners if it was more focussed and better organised.

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TABLES

A. Receptions Data

	N	%
Glasgow	79	66.4
Ayrshire	18	15.1
Lanarkshire	8	6.7
Other	14	11.7
Total	119	100

Table A.1: Place of origin

	N	%
21-25	33	27.7
26-30	36	30.3
31-35	22	18.5
36-40	13	10.9
40+	15	12.6
Total	119	100

Table A.2: Age range

Parental marital status	N	%
Married	57	47.9
Divorced	36	30.3
Widowed	6	5.0
Separated	20	16.8
Total	119	100

Table A.3: Parental marital status

	n	%
Biological family	92	77.3
Children's home	13	10.9
Other/list D	14	11.8

Table A.4: Circumstances of upbringing

	N	%
School Exclusion	65	54.6%

Table A.5: School Exclusion

Qualifications	N	%
No qualifications	88	73.9
Standard Grades/Scotvecs	26	21.8
Highers and above	5	4.2
Total	119	100

Table A.6: Qualifications

	N	%
Single	64	53.8
Common Law	26	21.8
Married	17	14.3
Divorced	6	5.0
Separated	6	5.0

Table A.7: Marital status

	N	%
Unemployed	13	10.9
Unskilled manual	86	72.3
Skilled manual	17	14.3
Professional/managerial	3	2.5
Total	119	100

Table A.8: Occupation

	N	%
Owner occupier	5	4.2
Private tenancy	16	13.3
Council tenancy	50	41.7
Hostel	6	5.0
Homeless	7	5.8
With family member	35	29.2
Total	119	100

Table A.9: Accommodation

	N	%
No psychiatric contact	76	63.9
Inpatient	9	7.6
Outpatient	29	24.4
Court report	5	4.2
Total	119	100

Table A.10: Psychiatric contact

Self Harm	N	%
1-4	9	7.6
5-10	4	3.4
>10	6	5.0
Total	19	16

Table A.11: Number of self harm attempts

	N	%
Antidepressant	6	5
Antipsychotic	4	3.6
No psychotropic medication	109	91.4
Total	119	100

Table A.12: Type of psychotropic medication

	N	%
Psychiatric history	8	6.7
Psychiatric history + drug and alcohol	4	3.4
Drug/alcohol	15	12.6
No family history	92	77.3
Total	119	100

Table A.13: Family psychiatric history

	N	%
Remand	63	52.9
Convicted	56	47.1
Total	119	100

Table A.14: Remand/convicted

Charge/conviction	N	%
Crimes of violence	29	24.4
Crimes of Indecency	5	4.2
Crimes involving dishonesty	34	28.6
Fire-raising	2	1.7
Other crimes	22	18.5
Miscellaneous offences	15	12.6
Motor vehicle offences	12	10.1
Total	119	100

Table A.15: Current charge/conviction

	N	%
None	19	16.0
Crimes of violence	68	57.1
Sexual offences	2	1.7
Crimes of Dishonesty	17	14.3
Other crimes	4	3.4
Miscellaneous Offences	4	3.4
Driving offences	5	4.2
Total	119	100

Table A.16: Most serious previous offences

Convictions	n	%
0	6	5.0
1-10	34	28.6
10-20	25	21.0
>20	54	45.4
Total	119	100

Table A.17: Number of Convictions

Sentences	n	%
0	23	19.3
1-10	65	54.6
10-20	19	16.0
>20	12	10.1
Total	119	100

Table A.18: Number of sentences

	n	%
None	25	21.0
Under 1 year	29	24.4
1 to 5 years	21	17.6
Over 5 years	44	37.0
Total	119	100

Table A.19: Total time served in prison

B: Open Doors Participants and Controls

	Subject		Matched subjects		Controls	
	N	%	n	%	n	%
Glasgow and Paisley	36	65.5	28	65.1	29	67.4
Ayrshire	12	21.8	9	20.9	7	16.3
Lanarkshire	3	5.5	3	7.0	3	7.0
Other	4	7.3	3	7.0	4	9.4
Total	55	100.0	43	100.0	43	100.0

Table B.1 Place of origin

	subjects		Matched subjects		controls	
	n	%	N	%	n	%
21-25	16	29.1	14	32.6	13	30.2
26-30	14	25.5	11	25.6	10	23.3
31-35	16	29.1	10	23.3	12	27.9
36-40	5	9.1	5	11.6	4	9.3
41+	4	7.3	3	7.0	4	9.3
Total	55	100	43	100	43	100

Table B.2 Age

	Subjects	Matched subjects	Controls
Average age	29.96	29.67	30.02
Range	21-47	21-45	21-45

Table B.3: Average age

Parents Marital Status	Subject		Matched subjects		Controls	
	N	%	N	%	N	%
Married	21	38.2	17	39.5	20	46.5
Divorced	24	43.6	18	46.5	15	34.9
Widowed	6	10.9	5	11.6	3	7.0
Separated	2	3.6	2	4.7	4	9.3
Unknown	2	3.6	1	2.3	1	2.3
Total	55	100.0	43	100	43	100

Table B.4: Parent's marital status

	Subject		Matched subjects		Control	
	N	%	N	%	N	%
Biological family	25	45.5	22	51.2	23	53.5
Children's home	1	1.8	1	2.3	1	47.3
List D School	29	52.8	20	46.5	19	44.2
Total	55	100.0	43	100	43	100

Table B.5: Circumstances of Upbringing

	Subject		Matched subjects		Controls	
	N	%	N	%	N	%
School Exclusion	31	56.4	23	53.5	26	61.9

Table B.6: School Exclusion

Qualifications	Subject		Matched controls		Controls	
	N	%	N	%	N	%
No Qualifications	42	76.4	33	76.7	29	67.4
Standard Grades	12	21.8	9	20.9	14	32.6
Highers and above	1	1.8	1	2.3		
Total	55	100	43	100	43	100

Table B.7: Qualifications

Marital Status	subject		Matched subjects		control	
	n	%	n	%	n	%
Single	31	56.4	27	62.8	18	41.9
Common Law	9	16.4	4	9.3	16	37.2
Married	6	10.9	4	9.3	3	7.0
Divorced	3	5.5	3	7.0	4	9.3
Separated	4	7.3	3	7.0	2	4.7
Widowed	2	3.6	2	4.7		
Total	55	100	43	100	43	100

Table B.8: Marital Status

	Subjects		Matched Subjects subjects		Controls	
	N	%	N	%	N	%
Never worked	11	20	9	20.9	8	18.6
Unskilled manual	33	60	24	55.8	21	48.8
Skilled Manual	11	20	10	23.3	14	32.6
Total	55	100	55	100	43	100

Table B.9: Occupation

	Subject		Matched controls		Control	
	n	%	N	%	n	%
Owner	2	3.6	1	2.3		
Private Tenancy	4	7.3	3	7.0	7	16.3
Council	19	34.5	13	30.2	20	46.5
Hostel	5	9.1	5	11.6	2	4.7
Homeless	10	18.2	9	20.9	8	18.6
With relatives	15	27.3	12	27.9	6	14
Total	55	100	55	100.0	43	100

Table B.10: Accommodation

Fits	Subjects		Matched subjects		Controls	
	N	%	N	%	N	%
Epileptic	8	14.5	7	16.3	2	4.7
Drug withdrawal	7	12.7	5	11.6	7	16.3
Alcohol withdrawal	2	3.6	2	4.7	2	4.7
No Fits	38	69.1	29	67.4	32	74.4
Total	55	100	43	100	43	100

Table B.11 Type of fit

Type psychiatric contact	Subjects		Matched subjects		Controls	
	N	(%)	N	%	N	(%)
Inpatient	17	30.9	15	34.8	7	16.3
Outpatient	29	52.7	22	51.	13	30.2
Court report	2	3.6	1	2.3	9	20.9
No contact	7	12.7	6	14.0	14	32.6
Total	55	100	43	100	43	100

Table B.12: Type of Psychiatric contact

	Subjects		Matched subjects		Controls	
	N	%	N	%	N	%
0	18	32.7	11	25.6	32	74.4
1-4	25	45.5	22	51.1	5	11.6
5-10	2	3.6	1	2.3	1	2.3
>10	10	18.2	9	20.9	1	2.3
Total	55	100	43	100	43	100

Table B.13: Number of self-harm attempts

	Subject		Matched Subjects		Control	
	N	(%)	N	%	N	(%)
Antidepressant	16	29.1	13	30.2	4	9.3
Antipsychotic	12	21.8	11	25.6	1	2.3
Antidepressant + antipsychotic	5	9.1	3	7.0	1	2.3
No Medication	22	40.0	16	37.2	37	86.0
Total	55	100	43	100	43	100

Table B.14: Type of psychotropic medication

Type of family psychiatric history	Subject		Matched subjects		Controls	
	N	%	N	%	N	%
No family history	33	60.0	26	60.5	32	74.5
Family History of depression	17	30.9	14	32.5	9	20.9
Family history of schizophrenia	4	7.3	2	4.7	1	2.3
Other	1	1.8	1	2.3	1	2.3
Total	55	100	43	100	43	100

Table B.15: Family Psychiatric history excluding drug and alcohol

Family drug/alcohol use	Subject		Matched controls		Control	
	n	%	N	%	n	%
Positive	32	58.2	26	60.5	24	55.8

Table B.16: Family History of drug or alcohol use

Remand/convicted	Subjects		Matched subjects		Controls	
	n	(%)	N	%	N	%
Remand	16	29.1	15	34.9	15	34.9
Convicted	39	70.9	28	65.1	28	65.1
Total	55	100	43	100	43	100

Table B.17: Remand/convicted

	Subjects		Matched subject		Controls	
	n	%	N	%	n	%
No previous offences	2	3.6	1	2.3	1	2.3
Crimes of violence	33	60.0	25	58.1	24	55.8
Crimes of indecency	1	1.8	1	2.3		
Crimes of dishonesty	11	20.0	9	20.9	7	16.3
Miscellaneous	5	9.1	5	11.6	5	11.6
Motor vehicle	3	5.5	2	4.7	5	11.6
Total	55	100	43	100	43	100

Table B.18: Most serious previous offence

	Subject		Matched subjects		Controls	
	n	%	N	%	n	%
0	2	3.6	1	2.3	1	2.3
1-10	9	16.4	9	20.9	11	25.6
11-20	15	27.3	10	23.3	10	23.3
21-30	6	10.9	5	11.6	3	7.0
30+	23	41.8	18	41.8	18	41.8
Total	55	100	43	100	43	100

Table B.19: Number of convictions

	Subjects		Matched Subjects		Controls	
	n	%	N	%	n	%
0	4	7.3	3	7.0	8	18.6
1-10	20	36.4	18	41.9	15	34.9
11-20	18	32.7	11	25.6	11	25.6
21-30	4	7.3	3	7.0	6	14.0
31+	9	16.4	8	18.6	3	7.0
Total	55	100	43	100	43	100

Table B.20: Number of previous sentences

	Subjects		Matched Subjects		Controls	
	N	%	N	%	n	%
0	4	7.3	3	7.0	6	14.0
Under 1 year	4	7.3	3	7.0	7	16.3
1-5 years	15	27.3	13	30.2	11	25.6
Over 5 years	32	58.2	24	55.8	19	44.2
Total	55	100	43	100	43	100

Table B.21: Time in prison prior to this sentence/remand

	Subject		Matched subjects		Control	
	N	%	N	%	N	%
No drug/alcohol use	8	14.5	7	16.3	3	7
Drug dependence/abuse	25	45.4	20	46.5	26	60.5
Alcohol dependence/abuse	19	34.5	14	32.6	13	30.2
Both drug/alcohol use	3	5.5	2	4.7	1	2.3
Total	55	100	43	100	43	100

Table B.22: Drug/alcohol use

Number of personality disorders	Subject		Matched subjects		Control	
	N	%	N	%	N	%
0	4**	7.3	2**	4.7	5	11.6
1	14**	25.5	10**	23.3	25	58.1
2	15**	27.3	13**	30.2	7	16.3
3	14**	25.5	12**	27.9	4	9.3
4	3**	5.5	1**	2.3	1	2.3
5	5**	9.1	5**	11.6	1	2.3
Total	55	100	43	00	43	100

Table B.23: Number of personality disorders ** $p<0.001$

	Subject		Matched controls		Control	
	n	%	N	%	n	%
Present	45	81.8	36	83.7	35	81.4

Table B.24: Antisocial personality disorder

	Subjects		Matched subjects		Controls	
	N	%	N	%	N	%
0-5	10	18.2	8	18.6	23	53.5
6-10	5	9.1	3	7	4	9.3
11-15	7	12.7	5	11.6	8	18.6
16-20	8	14.5	8	18.6	5	11.6
21-25	13	23.6	9	20.9	2	4.7
26-30	12	21.8	10	23.3	1	2.3
Total	55	100	43	100	43	100

Table B.25: General Health Questionnaire scores

	Subject		Matched controls		Control	
	n	%	N	%	N	%
1-5	1	1.9			33	76.7
6-10	11	20.8	7	16.3	9	20.9
11-15	11	20.8	8	18.6		
16+	30	56.5	28	65.1	1	2.3
Total	55	100	43	100	43	100

Table B.26: Health of the Nation Outcome Scores

	Subjects		Matched controls		Controls	
	n	%	N	%	n	%
Under 70	8	14.5	6	14	1	2.3
71-80	10	18.2	7	16.3	7	16.3
81-90	19	34.5	15	34.9	16	37.2
91-100	11	20	11	25.6	11	25.6
101-110	3	5.5	3	7	5	11.6
110-	1	1.8			2	4.7
Missing	3	5.5	1	2.3	1	2.3
Total	55	100	43	100	43	100

Table B.27: Quick Test Scores

Remand vs convicted participants

	Remand	Convicted
No drug/alcohol misuse	4	4
Drug dependence/abuse	2	23
Alcohol dependence/abuse	7	12
Both drug/alcohol use	3	
Total	16	39

Table B.28:drug/alcohol misuse participants remand vs convicted P <0.05

	Remand	Convicted
Owner		2
Private tenancy	1	3
Council accommodation	4	15
Hostel		5
Homeless	2	8
Other (with family)	9	6
Total	16	39

Table B.29: type of accommodation participants remand vs convicted P <0.05

Controls- Remand vs convicted.

	remand	convicted
No psychotropic medication	16	21
Psychotropic medication		6
Total	16	27

Table B.30: Use of psychotropic medication controls remand vs convicted P<0.05

C: Outcome Data

GHQ score	Original score		Follow up score	
	N	%	N	%
0-5	5	14.3	18	51.4
6-10	4	11.4	5	14.3
11-15	5	14.3	3	8.6
16-20	6	17.1	4	11.4
21-25	7	20.0	2	5.7
26-30	8	22.9	3	8.6
Total	35	100	35	100

Table C.1: GHQ scores original vs follow up

HoNOS score	Original score		Follow up score	
	N	%	N	%
0-5	1	1.9	15	27.3
6-10	11	20.8	18	32.7
11-15	11	20.8	16	29.1
16+	30	56.5	6	10.9
Total	55	100	55	100

Table C.2: HoNOS I and II

	N	%
<16	1	2.8
16-20	3	8.3
20-25	10	27.8
25+	22	61.1
Total	36	100.0

Table C.3: Participant satisfaction score